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No. 9 IN THE PHYSICIANS' AND STUDENTS' READY REFERENCE SERIES.

MEDICAL SYMBOLISM

IN CONNECTION WITH

HISTORICAL STUDIES IN THE ARTS OF HEALING AND HYGIENE.

ILLUSTRATED.

BY

THOMAS S. SOZINSKEY, M.D., PH.D.,
AUTHOR OF "THE CULTURE OF BEAUTY," "THE CARE AND CULTURE OF CHILDREN," ETC.

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DEDICATION.

THE medical profession is often spoken of as non-progressive. As a practical member of it, the author is of a different opinion. He knows full-well not only that, to many, age does not tend to make anything medical more worthy of attention, but that the old is apt to be wilfully overlooked. He discovered some time ago that in the library of the College of Physicians of Philadelphia—the centre, probably, of medical learning in the United States—Adams' edition of the works of Hippocrates had rested with the leaves uncut for over twenty years. New things are far too much in vogue. If Bacon were alive to-day he might still say, with too much truth, as he said three hundred years ago: "Let a man look into physicians' prescripts and ministrations and he will find them but inconstancies and every-day devices, without any settled providence or project" ("Advancement of Learning"). The age is too much one of trial, of incoherency, to be either eminently scientific or highly successful in practice. Beyond question, the medicine of the past is harmfully neglected; for its literature few have a desirable taste, and fewer yet a sufficient knowledge. Deploring this state of things, the author would gladly assist in bringing about a change. Hence, it affords him pleasure to dedicate this essay to his professional brethren.

PREFACE.

In this essay I have treated, as the title indicates, of medical symbolism in connection with studies, essentially historical, in the arts of healing and hygiene. Some parts of it bear only indirectly on the main subject; but they serve to render the whole more complete and interesting. Doubtless the reader will not be inclined to find much fault with any of the apparent digressions.

In the score of chapters into which the essay is divided, attention is invited to numerous more or less remarkable matters pertaining to medicine, most of them of very ancient date, and some of practical importance. Medical mythology is treated of very fully; and, on this, as indeed on all points, the results of the most recent archæological and other investigations are given. All I have said is deserving, I believe, of the consideration of educated physicians.[1] "The wise man will seek out the wisdom of all the ancients," says the author of "Ecclesiasticus,"[2] one who had the tastes of a cultivated medical man.

Although the essay is mainly on old things, I venture to hold that it contains much which a fairly well-read physician will find fresh. The ground gone over has been little trodden before. It may be said, as Pliny did, by way of suggestion of difficulties to be overcome,

[1] That scholarly old writer, Ashmole, well says: "What some light brains may esteem as foolish toyes, deeper judgments can and will value as sound and serious matter." Theatrum Chemicum Britannicum, 1652.

[2] Ecclesiasticus, xxxix, 1.

when he sat down to write his sketch of the history of the art of medicine, "that no one has hitherto treated of this subject."[1] But just as Pliny overlooked what Celsus had done, and done well, so in this case, some worthy author may have been overlooked; still, this is improbable. What is here presented, and in part coherently, is gathered from manifold sources. I have limited my references as much as possible to works in the English language, or translations. The statements of authors are given in their own words; but quotations of wearisome length have been avoided.

The possibility of research in respect to the themes treated of, and allied ones, not being limited, the essay cannot be expected to be either perfect or complete. Whatever its merits or shortcomings may be, however, it is an outcome of congenial studies pursued for their own sake. I believe it contains a fund of information which deserves to be widely known. The perusal of it may, at least, serve to excite an interest in the ample literature and long and remarkable history of the benevolent and learned profession of medicine.

T. S. S.

[1] Natural History, xxi.

BIOGRAPHICAL SKETCH

OF

THOMAS S. SOZINSKEY, M.D., PH.D.

THOMAS S. SOZINSKEY, M.D., PH.D., the author of this interesting little volume, was born in County Derry, Ireland, and died in the city of Philadelphia, April 18, 1889, in the thirty-seventh year of his age. He came to this country when seventeen years of age, and settled in Philadelphia. Entering the University of Pennsylvania some years later, he graduated from that institution, and afterward began the study of medicine, receiving the degree of Doctor of Medicine in the year 1872. He also received the degree of Doctor of Philosophy from the same faculty.

Dr. Sozinskey immediately entered upon his career as medical practitioner in Philadelphia, where he remained until his marriage to Miss Abby W. Johnson, a daughter of Luke Johnson, who was a descendant of one of the founders of Germantown.

Shortly after his marriage Dr. Sozinskey decided to visit Kansas City, partly with the idea of locating there; but after a sojourn of about one year in the West he returned to Philadelphia, and began again the practice of his chosen profession, succeeding in a few years in building up a very extensive and lucrative practice in the northwestern section of the city.

Dr. Sozinskey was a man highly intellectual, studious, and scholarly. He was a frequent contributor to a number of leading medical journals, as well as the author of several well-known works, among which may be men-

tioned "The Care and Culture of Children." Also, a little volume entitled "Personal Appearance and the Culture of Beauty."

His last literary effort, "Medical Symbolism," which is a work showing a vast amount of research, was completed just before his death. He was induced to undertake "Medical Symbolism" after the appearance of an article bearing this title in the *Medical and Surgical Reporter*, which attracted considerable attention, both in this country and in Europe.

He received so many letters from men prominent in the medical profession, suggesting that a book be written upon this subject, that the task was undertaken.

By his untimely death three small children became orphans, the mother having died one year earlier, after a short illness.

His readiness to attend the sick, regardless of compensation, greatly endeared him to a large number of the poor.

Containing, as it does, so much that is unique, and in a field not often touched by previous writers, "Medical Symbolism" is sure to find appreciative readers, not only among the fraternity to which Dr. Sozinskey belonged, but among the scientific and literary generally; and, from the encouragement already received, the publishers feel confident of a large and wide-spread demand for this little volume. E. S. P.

PHILADELPHIA, October 27, 1890.

COMMENDATORY LETTERS.

PHILADELPHIA, Jan. 24, 1884.

DR. T. S. SOZINSKEY:

DEAR SIR:—Please accept my thanks for your paper on "Medical Symbolism," received this morning. I have read it with great interest, more especially as it is in the direction of the higher education of physicians. The preponderance of the so-called practical (empirical) in medical literature, which appeals strongly to the *trade* element in the profession, makes such a contribution all the more enjoyable.

Very truly yours,

FRANCES EMILY WHITE.

1427 N. SIXTEENTH ST.

DR. SOZINSKEY:

DEAR DOCTOR:—Many thanks. You ought to enlarge the article to a little book. It interested me greatly. In a *bas-relief* of myself by St. Gaudens, New York, he has set beside the head the caduceus and twin serpents as symbolical; at all events, they will symbolize my relation to snakes.

Yours truly,

WEIR MITCHELL.

1524 WALNUT ST., PHILA.

PHILADELPHIA, Jan. 23, 1884.

DR. T. S. SOZINSKEY:

MY DEAR DOCTOR:—I write to thank you for a copy of your interesting and instructive paper on "Medical Symbolism." In Fergusson, on "Tree and Serpent Worship," which you quote, you can readily trace the connection between the emblems of religion and medicine. I recognize that, as priest and physician were once the same person, medicine is yet justly termed "the divine art." It affords me much pleasure to see your studious interest in your profession.

Yours truly,

HENRY H. SMITH.

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MEDICAL SYMBOLISM.

CHAPTER I.

REMARKS ON THE MEANING OF SYMBOLS.

A SYMBOL is an illustration of a thing which, to use a poetic phrase, is "not what it seems." When a familiar object, or figure of any kind, from some cause or other, has attached to it a meaning different from the obvious and ordinary one, it is symbolic. Thus, if one take a poppy-head to convey the idea of sleep, it is a symbol; one may regard it as symbolic of sleep, or, if he choose, of Hypnos (Somnus), the god of sleep. The illustration on the next page will afford a still more apt example. To the eye, it appears to be simply a partly coiled serpent resting on a pedestal. That is, in truth, what it is. But, regarded from the stand-point of the student of medical symbolism, it has another and very different signification. Before such a figure many a human being, diseased and suffering, has bowed in reverence and piously offered to it petitions for relief; to many a noble Greek and haughty Roman, indeed, to generations of such, it was a god, the great god of "the divine art," as medicine was often beautifully called in ancient times. The serpent is the most important of medical symbols.

In any composite figure the elements of it are spoken of as *attributes;* and of these some are *essential* and some *conventional.* The essential ones only are, strictly speaking, symbols. Thus, in a representation of the

Goddess of Liberty, the cap is not a symbol; it is a conventional attribute. Says the learned and distinguished historian of ancient art, C. O. Müller, "The essence of the symbol consists in the supposed real connections of the sign with the thing signified."[1] In some authoritative works, as, for instance, that of Fairholt,[2] the serpent in medical art is said not to be a symbol; but this is not true if it be taken to represent the god of medicine, which, as I have already stated, was done by both Greeks and Romans. Evidently, if taken as of this narrow meaning, there are not many comprehensive medical symbols. But I will take it in a wider sense; I will take it to mean any mystic figure or any kind of attribute. In doing so I do no more than Fairholt holds should be done. Referring to the words *symbol*, *image*, and *allegorical figure* as well as *attribute*, he says, "Their shades of difference are so slight that it would be most convenient to regard them all under the general term *symbol*."[3]

FIG. 1.—A MEDICAL SYMBOL.

I may add these remarks of Tiele: "A symbol is a simple or complex thought clothed in a sensuous form. A myth is a phenomenon of nature represented as the act of a person. Usually symbols originate in myths, and in every case mythology is antecedent to symbolism."[4] There are many symbols, however, which never had anything to do with myths, as will become evident later.

[1] Introduction to a Scientific System of Mythology, p. 197. London, 1844.

[2] A Dictionary of Terms in Art. London, 1854.

[3] *Ibid.* Article, "Attribute."

[4] History of the Egyptian Religion, p. 219. London, 1882.

In the wide sense in which I propose to use it, symbol is almost or quite synonymous with *emblem*, as popularly used. Mackenzie[1] and other authorities, however, state that the word emblem is properly applicable only to a mystic object or figure of two or more parts. Thus, it is more correct to speak of "a skull and cross-bones" as emblematic than symbolic of a poison or of death. Again, while a serpent might properly be called a symbol, one in connection with a staff is an emblem. In this restricted sense, emblem is closely allied in meaning to *allegory*. But in an allegorical representation most of the elements of it are apt to be symbolic, and beauty of the whole is a consideration. The great Epidaurian representation of Æsculapius is an example. A simple image or *statue* is essentially a symbol.

I need hardly say that any figure may or may not be a symbol; but a mere *figure* is simply a representation of any object regarded as void of any other than its ordinary meaning. A conventional representation of any idea may be nothing more than a figure. In this sense, it is sometimes called an *ideograph*.

[1] Royal Masonic Cyclopædia. London, 1877.

CHAPTER II.

THE SERPENTINE GOD OF MEDICINE AT ROME.

As I have already intimated, the god of medicine—that is, Æsculapius[1]—was not only on familiar terms, so to speak, with the serpent, but at times given a serpentine form. Pausanias expressly informs us that he often appeared in such singular shape.[2] The visitor to imperial Rome about two thousand years ago saw this divinity in reptilian guise an object of high regard and worship. It is worth while to enter into a short study of the matter.

Now, at the outset, I may observe that it is a noteworthy fact that in their regard for medical men the early Greeks and others contrasted remarkably with the Romans. The Greeks would seem to have duly prized the class. One has but to turn to Homer to find evidence of the fact. A passage suggested by Machaon's splendid exercise of his beneficent art, spoken by Idomeneus when the "offspring of the healing god" was wounded by a dart fired by "the spouse of Helen" (Paris), and "trembling Greece for her physician fear'd," runs :—

> "A wise physician skill'd our wounds to heal,
> Is more than armies to the public weal."[3]

Cowper translates this interesting couplet more literally than Pope :—

> "One so skill'd in medicine and to free
> The inherent barb is worth a multitude."

[1] The Greek form of the name is Asclepios or Asklepios, Ἀσκληπιὸς. The Latin form being the one in general use, I will adhere to it in this essay.

[2] Itinerary of Greece (translation), vol. iii, p. 23. [3] Iliad, xi.

This is a very noble tribute to the physician; in fact, I know of but few as good, among them being the one in "Ecclesiasticus" which reads: "The skill of the physician shall lift up his head and in the sight of great men he shall be praised."[1] The latter is Hebræo-Egyptian in origin, and its date is about two hundred years before our era. The early Romans did not look on doctors with any such favor.[2]

It is a well-known fact that the art of medicine was never very enthusiastically or successfully cultivated by the Romans. It was not until a comparatively late date that medical practitioners existed among them at all. Pliny has left us some interesting notes on the matter. After the statement that many nations have gotten along without physicians, he says: "Such, for instance, was the Roman people for a period of more than six hundred years; a people, too, which has never shown itself slow to adopt all useful arts, and which even welcomed the medical art with avidity until, after a fair experience of it, there was found good reason to condemn it."[3] He himself was not a great friend of it.

Cato, who died in the year of the city of Rome 605, said, authoritatively: "They (the Greeks) have conspired among themselves to murder all barbarians with their medicine, a profession which they exercise for lucre, in order that they may win our confidence and despatch us all the more easily. I forbid you to have anything to do with physicians."[4] Notwithstanding this, the imperious old Roman had not a personal dislike to taking medicine; "far from it, by Hercules," says Pliny,

[1] Ch. xxxviii, v. 3.

[2] Cicero would appear to have duly prized the physician. I recall a passage of his to the effect that in no way can man approach so near to the gods as by conferring health on his fellows.

[3] Natural History, xxix, 7. [4] *Ibid.*, xxix, 8.

"for he subjoins an account of the medical prescriptions by the aid of which he had ensured to himself and his wife a ripe old age."[1]

It appears that the first physician who exercised his profession at Rome was "Archagathus, the son of Lysanias, who came over from Peloponnessus in the year of the city 335." He was kindly welcomed, and, from his special line of practice, was called "Vulnerarius;" but, from cruelty displayed "in cutting and searing his patients, he brought the art and physicians into disrepute."[2] It is this experience to which Pliny refers in the foregoing quotation.

There is reason to believe that the Romans never regarded medicine as an art appreciatively. They have transmitted to posterity little that is original and valuable. Besides what is found in Pliny's work, the production of Celsus[3] is about all that calls for special mention, and it is possible that the latter, as well as the former, was only a compiler. Pliny significantly says: "The art of medicine at the present time even teaches us in numerous instances to have recourse to the oracles for aid."[4] He lived from 23 to 79 A.D.

The Roman people had no special god of medicine until the year 292 B.C. In the preceding year, the prevalence of a pestilence caused much consternation. This led to a consultation of the Delphian Oracle, or, according to Livy (see page 9), the Sibylline Books, as to what should be done, and the command of "the Delphic Oracle, or of the Sibylline Books," to use the language of an authoritative work,[5] was given, to send an embassy to procure the aid of the Grecian god of healing, Æsculapius.

[1] Natural History, xxix, 8.
[2] *Ibid.*
[3] De Medicinâ.
[4] Natural History, xxix, 1.
[5] Smith's Dictionary of Greek and Roman Biography and Mythology.

The story of the bringing of Æsculapius to Rome, like that of the bringing of Cybele from Pessinus in Galatia, is an interesting one, and must be known if one would fully appreciate the fact of the god being given the serpentine form, the serpent being generally regarded as only an attribute of him at his chief seat, the great Epidaurian Asclepion, or Temple of Health. It is graphically told by Ovid.

Ovid begins his poem[1] with an invocation to the "melodious maids of Pindus;" and, addressing them, continues:—

> "Say, whence the isle which Tiber flows around,
> Its altars with a heavenly stranger grac'd,
> And in our shrines the God of Physic plac'd?"

We are then told that—

> "A wasting plague infected Latium's skies.
> * * * * * * * * *
> In vain were human remedies apply'd.
> Weary'd with death, they seek celestial aid,
> And visit Phœbus in his Delphic shade."

The reply of the Oracle is this:—

> "Relief must be implor'd and succour won
> Not from Apollo, but Apollo's son.
> My son to Latium borne shall bring redress;
> Go with good omens, and expect success."

The Senate appointed an embassy to carry out the order:—

> "Who sail to Epidaurus' neighbouring land."

To it the god (Æsculapius) is represented as saying:—

> "I come and leave my shrine.
> This serpent view, that with ambitious play
> My staff encircles, mark him every way;
> His form, though larger, nobler, I'll assume,
> And, changed as gods should be, bring aid to Rome."

[1] Metamorphosis, xv. Translation by Mr. Welsted.

In due time "the salutary serpent,[1] the god, reached the Island of the Tiber and assumed "again his form divine":—

> "And now no more the drooping city mourns;
> Joy is again restor'd and health returns."

There is little or no reason to doubt that there was really a formal bringing of Æsculapius to Rome, a cosmopolitan city which, indeed, as Gibbon states without much exaggeration, bestowed its freedom "on all the gods of mankind."[2] Livy, the historian, speaks of the matter as follows:—

"The many prosperous events of the year (459) were scarcely sufficient to afford consolation for one calamity, a pestilence, which afflicted both the city and country and caused a prodigious mortality. To discover what end or what remedy was appointed by the gods for that calamity, the Books were consulted, and there it was found that Æsculapius must be brought to Rome from Epidaurus. However, as the Consuls had full employment in the wars, no farther steps were taken in that business during this year, except the performing of a supplication to Æsculapius of one day's continence."[3] Elsewhere[4] he says that the god was brought the following year,—that is, A.U.C. 460, or 292 B.C.

The Island of the Tiber (*Insula Tiberina*, now *Isola Tiberina*), the "*inter duos pontes*" of the early centuries of our era, where Æsculapius was worshipped, and which was sometimes called by his name (*Insula Æsculapii*), is within the limits of the city of Rome. According to

[1] Although there is little evidence to show that serpent-worship was indigenous in Rome, Fergusson holds that "such an embassy being sent on the occasion in question indicates a degree of faith on the part of the people which could only have arisen from previous familiarity." Tree and Serpent Worship, p. 19.

[2] The Decline and Fall of the Roman Empire, ch. ii.

[3] Livy, x, 47.

[4] *Ibid.*, xxix, 11.

tradition, it originated from alluvial accumulations within the period of Roman history.[1] It is rather remarkable that, excepting the one at the mouth (*Insula Sacra*, now *Isola Sacra*), there is no other along the whole course of the famous river. It is ship-shaped, and quite small in size, being only about a quarter of a mile in length,[2] and has been called "San Bartolomeo," from the church which has long occupied the site of the ancient Temple of Health.[3] Mr. Davies speaks of it at length in his interesting book. After an account of the origin of the worship of Æsculapius on it, he says:—

"It was in commemoration of this event that the island was fashioned in the form of a ship. Huge blocks of travertine and peperino still remain about the prow (pointing down the stream), imitating on a grand scale the forms of the planks, upon which are chiseled the figure of a serpent twined around a rod, and, farther down, the head of an ox. A temple was raised to Æsculapius, in which his statue was placed, which probably stood in the fore part of the simulated vessel, hospitals for the sick occupying the sides, a tall column or obelisk rising in the midst to represent a mast. Temples were also dedicated to Jupiter and Faunus.[4] To these were added a prison in the days of Tiberius."[5]

[1] In his Life of Publicola, Plutarch gives an interesting account of its origin. The sacrifice of corn and trees on a field belonging to the Tarquins, in the Campus Martius, had much to do with it. These being cast into the river, found lodgment at shallows where the island is, which favored alluvial accumulations. See also Livy, ii, 5.

[2] It is stated by Sir George Head that it is twelve hundred feet in length and four hundred in breadth. Rome—A Tour of Many Days, vol. iii, p. 106. London, 1849.

[3] A hospital established by Gregory XIII in 1581 and several residences are also on the island.

[4] God of fields and shepherds. The Temple of Æsculapius was the most ancient, having been dedicated A.U.C. 462.

[5] Pilgrimage of the Tiber, p. 63. London, 1875. Tiberius ascended the throne, A.D. 14. Plutarch, writing half a century later, says of the island:

Whether the establishment of the worship of the healing divinity on the island at Rome was brought about by chance, or deliberately, is not very clear. Pliny would seem to think that it was elsewhere at first when he says, "The Temple of Æsculapius, even after he was received as a divinity, was built without the city and afterward on an island."[1] The abhorrence of the people for physicians is given as the reason for isolating the institution. The noble Romans had no love for a class that made a trade of curing the sick, enriching themselves off the misfortunes of their fellow-men; they were shocked, says Pliny, "more particularly that man should pay so dear for the enjoyment of life."[2] There may have been other and better reasons. The Greeks themselves placed their asclepia in rural and often insular places. Thus, the great Epidaurian Asclepion was in a secluded vale, and two very celebrated ones, those of Cos and Rhodes, were, as the names indicate, on islands. It is needless to say that there are excellent sanitary reasons for placing sanatory institutions in the country, and especially on insular sites. It will be a long step in the right direction when we somewhat unwise moderns cease to have our medical institutions within the built-up parts of our cities and towns, and treat the sick, especially those affected with contagious diseases, at a distance from the well.

Devotion to the serpentine healer appears to have lingered long in sunny Italy.[3] A bronze serpent in the

"It is now sacred to religious uses." Life of Publicola. He states that several temples and porticoes had been built on it, but makes no reference to a prison.

[1] Natural History, xxix, 8. [2] *Ibid.*

[3] The Very Reverend Dr. Jeremiah Donovan states, in his learned work, that "the temple (of Æsculapius) being recorded by the Regionaries must have existed in the fifth century." Rome, Ancient and Modern, and its Environs, vol. iv, p. 431. Rome, 1842.

basilica of St. Ambrose was worshipped as late as the year 1001, but the precise import of it is not known. Referring to it, De Gubernatis says: "Some say that it was the serpent of Æsculapius, others that of Moses, others that it was an image of Christ. For us it is enough to remark here that it was a mythical serpent before which Milanese mothers brought their children when they suffered from worms in order to relieve them, as we learn from the depositions of the visit of San Carlo Borromeo to this basilica."[1] San Carlo suppressed the superstitious practice.[2]

[1] Zoological Mythology, or Legends of Animals, vol. i, p. 416. London and New York, 1872.

[2] It appears that the serpent has still devotees in Italy. It is said that what is called a snake festival is held once a year in a little mountain-church near Naples. Those attending carry snakes around their necks, arms, or waists. The purpose of the festival is to preserve the participants from poison and sudden death, and to bring them good fortune.

CHAPTER III.

THE ÆSCULAPIAN SERPENT.

It is not to be presumed that many in our day would seriously believe that Æsculapius assumed the form of a large serpent, in the famous legendary voyage to Rome; but it is hardly to be doubted, as I have already remarked, that there was actually a serpent brought from Epidaurus on the occasion. It is very probable that the Roman embassy deliberately brought one with them; still, the coming of the reptile on board the ship may have been accidental.[1] The latter was the case, according to one tradition. At any rate, there was sufficient ground on which a superstitious people could easily construct a mythical superstructure to please their fancy.

The assumption of the form of a serpent by the god of medicine was not an extraordinary thing, according to ancient beliefs. Plenty of instances might be cited. I may give one. Alexander the Great was believed by many to have been not the son of Philip, but of Jupiter Ammon, who appeared to Olympias in reptilian shape. Plutarch tells the story. It is amusingly related of Philip that "he lost one of his eyes as he applied it to the chink of the door, when he saw the god, in the form of a serpent, in his wife's embraces."[2] The ability to take on at pleasure any animal or other form was regarded as one of the distinguishing prerogatives of divinity.

[1] The port of Epidaurus not being within several miles of the grove of Æsculapius, it is very improbable that a serpent found its own way from the latter to the Roman ship.

[2] Lives of Illustrious Men.

Taking it for granted, then, that there was really a serpent transferred from Epidaurus to Rome, which was regarded as Æsculapius, the interesting question arises, of what species was it? A very conclusive answer may be given.

It is known that at the Epidaurian Asclepion a species of serpent existed in considerable numbers by permission. After stating that all serpents, "but particularly those of a more yellow color, are considered as sacred to Æsculapius, and are gentle and harmless toward men," Pausanias says: "They are alone nourished in the land of the Epidaurians; and I find that the same circumstance takes place in other regions."[1]

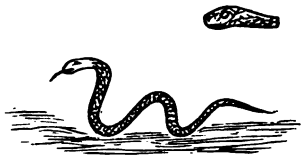

FIG. 2.—THE ÆSCULAPIAN SERPENT.

Here, then, is proof that there was a species of serpent which deserved to be characterized as Æsculapian.

It being reasonably certain that only one kind of serpent "was nourished in the land of the Epidaurians," and regarded as sacred to Æsculapius, the following passage from Pliny is interesting: "The Æsculapian snake was first brought to Rome from Epidaurus, but at the present day it is very commonly reared, in our houses even; so much so, indeed, that, if the breed were not kept down by the frequent conflagrations, it would be impossible to make head against the rapid increase of them."[2] It is evident from this statement that the serpent in question was not venomous, that its presence was prized, and that people would not wilfully kill it.

Now, a pretty species of oviparous, non-venomous

[1] Itinerary of Greece (translation), vol. ii, p. 213. London, 1794.
[2] Natural History, xxix, 23.

serpent, still common in Italy, is believed to be the "Æsculapian snake" of Pliny, called *Paroas* by Greek writers.[1] I have examined a number of specimens. Several are to be seen in the museum of the Academy of Natural Sciences, Philadelphia. It has been described by Shaw under the name of *Coluber Æsculapii*, but it is now often called *Elaphis Æsculapii*. A cut of it is given in Brehm's great popular work,[2] which is very good, except that it gives one the impression that the animal is decidedly large. The Æsculapian serpent is comparatively small, being from three to four and one-half feet in length, and about as thick as a stout walking-cane. It is orange-brown above, or, as Shaw puts it, "rufous colour on the upper parts, more or less deep in different individuals."[3] Beneath it is of a straw color. The scales of the back are oval and carinated, and those of the sides are smooth. The tapering tail measures about nine inches. Movement takes place through vertical waves or swellings. It is very active and can climb trees with facility. When attacked it will defend itself; but it is by nature gentle and is easily tamed.

In his brief description of it, Cuvier follows Shaw. He adds: "It is that which the ancients have represented in their statues of Æsculapius; and it is probable that the serpent of Epidaurus was of this species. (The *Coluber Æsculapii* of Linnæus[4] is of a totally different species, and belongs to America.)"[5]

The Æsculapian serpent is closely related to the ringed snake (*Natrix torquata*), the only British member

[1] As by Aristophanes in Plutus. In Liddell & Scott's Lexicon Πάρδας is defined to be "a reddish-brown snake sacred to Æsculapius."

[2] Thierleben. Grosse Auflage. Dritte Abtheilung. Erster Band. Seite 348. Leipzig, 1878.

[3] General Zoology, part ii, p. 452. London, 1802.

[4] Coronella venustrissima. [5] Animal Kingdom, vol. ix, p. 263.

of the family; and the common black snake (*Coluber constrictor*) of America is of the same genus; but it should not be classed, as was done by Linnæus, with the decidedly venomous viperine serpent, the *Viper communis*, or *Pelias berus*, of which Figuier says: "It is not improbable that it is the *echis* (ἔχις) of Aristotle and the *vipera* of Virgil, as it is the *manasso* of the Italians, the *adder* of the country-people of England and Scotland, and the *vipère* of France. It is found in all these countries and in Europe generally."[1]

In an article contributed to a medical journal[2] I have said, in reference to the Æsculapian serpent, that it is the one "which should always be shown in medical symbolism." This would hardly be questioned by many; yet I am disposed to think that the restriction is too exclusive. Another species of coluber, the uræus, or asp, has played a significant rôle, as a symbol of life and healing, especially in Egypt, as will be seen later. Our medical traditions, however, being mainly derived from the Greeks, it would therefore seem but right that we should confine ourselves very exclusively to the symbolism in use by them.

[1] Reptiles and Birds, p. 92. New York, 1870.

[2] The Medical and Surgical Reporter for January 5th and 12th, 1884.

CHAPTER IV.

THE EPIDAURIAN ORACLE.

In speaking of the god of medicine at Rome, mention was made of Epidaurus, the original great seat of worship of Æsculapius. In the Peloponnesian place of that name, in the district of Argolis, on the western shore of the Saronic Gulf, I will now pause a while; for here is a spot of earth of special interest, dearer than Salerno, or even Cos, to every lover of the annals, historical and legendary, of the healing art.

Very different is Epidaurus now from what it was in other days; there has been a change, and for the worse. Here was once the scene of teeming life; the home of a people of culture and renown. It is not so at present. As with many other parts of Greece, time has dealt harshly with Epidaurus. But for the ruins and the imperishable records we have of them, one could find very little there worthy of much attention.

It is chiefly in the work of Pausanias, before mentioned, that the great medical institution of Epidaurus, the Æsculapian Temple, with its auxiliaries, survives. This observing and inquisitive old Greek traveler has left an interesting account of it. He lived in the second century of our era.

The ruins have been carefully studied and described by Mr. Leake.[1]

Under a commission from the Archæological Society of Athens, Mr. P. Kavvadias, in 1881 and forward to the present time (1885), has been making exploratory

[1] Travels in the Morea, vol. ii. London, 1830.

excavations, for full accounts of which the "Proceedings of the Society" must be consulted.[1]

Although the Asclepion was not within the town of Epidaurus, it was generally spoken of as part and parcel of the latter. Thus, Strabo says: "Epidaurus was a distinguished city, remarkable particularly on account of the fame of Æsculapius, who was supposed to cure every kind of disease, and whose temple is crowded constantly with sick persons, and its walls covered with votive tablets, which are hung thereon and contain accounts of the cures in the same manner as is practiced at Cos and at Tricca."[2] In the time of the Romans, the town was regarded as "little more than the harbor"[3] of the Æsculapian Oracle. Still, at one time it was of considerable importance. Pausanias speaks favorably of it. In it there were statues of Æsculapius and his reputed wife, Epione, and of Diana, Venus, and others. There were public accommodations for persons dying and lying-in women. This was necessary, because births and deaths were not allowed to occur within the Sacred Grove. The exclusion was, according to Pausanias, "agreeable to a law which is established in the island of Delos."[4]

Epidaurus was open to intercourse with the Phœnicians and other peoples. Its citizens were enterprising. It is interesting to note that they colonized the island of Cos.

[1] Mr. Thos. W. Ludlow, of Yonkers, N. Y., has two interesting letters on the subject in the New York Nation, September 28, 1882, and February 15, 1883. No comprehensive account has as yet appeared in either the English, French, or German language. An interesting article on "Æsculapia as Revealed by Inscriptions," by Prof. A. C. Merriam, in Gaillard's Medical Journal for May, 1885, partly meets the want.

[2] Geography, viii. Translation in Bohn's Library.

[3] Smith's Dictionary of Greek and Roman Geography.

[4] Itinerary of Greece (translation), vol. ii, p. 212.

Under the name of Pidhavro the ancient town remains in existence; but it is a mere hamlet of a few dozen families, most of which are engaged in raising vegetables for the Athenian market.

Proceeding in a southwesterly direction from the site of Epidaurus, one comes, after a journey of about five Roman miles, to the location of the famous Epidaurian Oracle of Æsculapius. It is a little vale, bordered almost all around with shrubbery-clad hills, notable among which are Mounts Titthium, Cynortium, and Coryphæus, the first and second to the north, and the third to the southeast. At a little distance down it, flowing westerly and emptying into the river of Lessa, is a rivulet formed by two main branches, one of which springs from about Mount Coryphæus and traverses the sacred Ἄλσος, or Grove.

To the Sacred Grove, the name of Hierum, or, rather, Sto Hieron,[1] a synonym, is applied. It is less than a mile in circumference. Within it are found remains of most of the structures which it formerly contained. In the centre stood the Temple, or Sanctuary, of Æsculapius; in the southeast, at the foot of Mount Coryphæus, the theatre,[2] which afforded accommodation for twelve thousand people, and which is one of the finest ruins of ancient Grecian buildings; and southwest of the temple was the place devoted to athletic games, the Stadium, to the north of which were the Cistrum and the Tholus, or circular cell, about thirty feet in circumference, which contained paintings and other works of art, and probably served as a place of reunion of the officials of the sanctuary,

[1] Στὸ Ἱερὸν, sacred place.

[2] Mr. Ludlow says, in one of his letters, and also informs me privately, that Mr. Kavvadias has found the theatre to be without the peribolus of the Sacred Grove. Following Pausanias, Mr. Leake states it to be within the enclosure.

and for certain sacrifices and ceremonies. Water-pipes have been unearthed; and there are remnants of the peribolus, or enclosure, which, according to Leake, however, was present only on two sides, the steep hills answering the purpose on the others. The somewhat remarkable state of preservation of these ruins is largely due to the seclusion of the place.

Of course, the most notable building within the sacred grounds was the Temple.[1] This was the abode of the god; here was his oracle. His statue was of great splendor and highly renowned. It was formed of ivory and gold—chryselephantine—and was by Thrasymedes, of Parus. Æsculapius was represented as a man somewhat advanced in life, but of attractive presence, seated on a throne. His hair and beard were given long, perhaps too long for an ideal physician.[2] In his left hand he held a staff, and the other he held over the head of a serpent. At his feet was the figure of a dog. On the throne were wrought illustrations of the works of the Argive heroes. Bellerophon was shown in the act of slaying the Chimæra, and Perseus cutting off the head of Medusa.

Besides the temple, the theatre, gymnasium, and other buildings mentioned above, there were still others to meet the manifold needs of the numerous visitors. As those who came to consult the oracle remained a night or longer, there must have been an extensive dormitory. It is referred to by Pausanias.[3] Those, however, who

[1] There is reason to hope that Mr. Kavvadias will make valuable discoveries in excavating its ruins.

[2] Anything about a physician which might be the means of conveying disease from one to another is seriously objectionable. Woolen material is not the proper thing in the outside clothing, and one attending cases of contagious diseases should not wear gloves, unless he is wont to wash his hands well after each visit.

[3] Itinerary of Greece (translation), vol. ii, p. 213.

approached the god, always, I believe, passed the night in the sanctuary.

When at the height of its glory the Hierum was surely a place full of life. Being the most famous sanatory retreat, multitudes flocked to it from all parts of Greece and beyond. Many who came were, doubtless, invalids, but likely far more could not be classed as such. In fact, this Æsculapian Grove, although mainly a medical institution, a sort of hospital, might reasonably be taken as a prototype of modern popular health resorts.

The glory of the Epidaurian Oracle was not short-lived. In the year 292 B.C., the time when the Roman embassy paid the historic visit, it was very great; and five centuries later—that is, in the time of Pausanias—it had not passed away; the worship of the serpentine divinity had not then ceased.

With years the oracle accumulated riches, so that it became noted for its treasures. When, in the year 167 B.C., it was visited by L. Æmilius Paulus, after his conquest of Macedonia, it was rich in gifts presented by those who had obtained relief there from their afflictions. A century and a half later many of the valuable offerings had disappeared.

The visitors to the great oracle in search of health placed themselves under the care of the asclepiades, or disciples of the god. A special course of regimen (treatment) was followed. It is said that it was directed by Æsculapius, through dreams,—not necessarily a truth. The plan pursued was more or less scientific and free from superstition. Mr. Leake rather ungraciously remarks that the advisors, being "equally dexterous as priests and physicians, provided themselves with resources in either capacity, which they could turn

to the benefit of their patients' infirmities and their own profit."[1] The rules were decidedly strict. Records of patients were preserved, and the tablets on which they were placed were hung up in the temple and elsewhere. Some of those surviving from the stelæ, mentioned by Pausanias,[2] have been unearthed recently by Mr. Kavvadias. They are mostly statements of miraculous cures.[3]

Famous and immensely popular as the Epidaurian Oracle was, it cannot be said to have had notable natural advantages in its favor. The site was not one of the best, being low and hill-bounded,—conditions closely related to unhealthy states of humidity and heat of the atmosphere. The supply of water was not good, dependence having to be placed at times on cisterns. The locations of many other, but less noted, asclepia, were certainly far more sanatory. At Cos there was pure, mild sea-air; and, of those in the mountains or by fountains, each had one or more special natural attractions. Indeed, there could seemingly be few much worse sites than this close little Epidaurian valley, without even a mineral spring, or, in fact, a good spring of ordinary water to recommend it. But, greater than any one, or all climatic or other influences in power to attract the multitude, was the belief that at his birth-place and primary seat and oracle the influence of the god of medicine could be most effectively brought to bear to remove disease and restore health. As in this case, a pleasing superstition may work wonders.

[1] Travels in Morea, vol. ii, p. 428. The Æsculapian priest is not represented as an honest personage in the "Plutus" of Aristophanes. He stealthily gathers the cakes from the altars and "consecrates these into a sack."

[2] Itinerary of Greece (translation), vol. ii, p. 27.

[3] See note in succeeding chapter.

CHAPTER V.

ASCLEPIA AND THE ASCLEPIADES.

MANY asclepia, or temples of health, were in time established throughout Greece and her colonies and elsewhere. A recent writer states that at least three hundred and twenty are known "to have existed in antiquity; so that every town of importance must have had its sanctuary."[1] In success and length of existence they, of course, varied greatly. The one at Epidaurus has been spoken of, and others of great celebrity were those of Tricca, Cnidus, and Cos, to say nothing of some only a little less deserving of mention, such as those at Rhodes, Pergamus, Carthage, Athens,[2] and Rome.

The asclepion at Tricca, in Thessaly, was probably started by the sons of Æsculapius, Machaon and Podalirius. At any rate, according to Homer, they were attendants there. This was enough to bring it into repute, but its situation in the mountains was much in its favor as a popular sanatory resort.

The Coan and Cnidian asclepia were favorably located; the former on the island of the name, which Pliny speaks of as "flourishing and powerful in the highest degree and consecrated to Æsculapius,"[3] and the latter not far distant, on a site decidedly maritime, in Asia Minor. These temples were both very distinguished, and a degree of rivalry prevailed between them.

[1] Professor A. C. Merriam, in Gaillard's Medical Journal, May, 1885.

[2] Professor Merriam's article; also L'Asclépieion d'Athenès, by Paul Girard, Paris, 1882. An interesting little book, in which much may be learned about asclepia and the asclepiades. The Athenian asclepion was quite famous, and existed until beyond the fifth century.

[3] Natural History, xxii, 2.

In them there was undoubtedly much highly creditable medical knowledge in exercise. The same was probably the case in most, or perhaps all, others, especially in later times; but it is in respect to those only that we have indubitable evidence of the fact. Of the two schools, the adherents of the Cnidian paid special attention to the symptoms of individual cases, and avoided, as much as possible, powerful cathartics, bleeding, and other active means of cure.

Whatever may have been the success of the various asclepia, institutions which were finally blotted out in the early part of the fourth century by Constantine, the first Christian emperor,[1] that of Cos was destined to make the greatest impress on the medicine of the future. It was the good fortune of this institution to have in connection with it, at the acme of its career, a great author as well as physician. Hippocrates, a native of the island, rendered the fame of the Coan school imperishable, and gave to his fellow-men throughout the world, in all time to come, a legacy of incalculable value. Through this early and great medical writer his *alma mater* has been made, in a manner, that of the medical man of all ages. From Cos sprang forth at the touch of a humble man, afterward called appreciatively "the divine old man," a mass of medical knowledge, wonderfully pure and good, which constitutes the main body of the real medical science of our own day.

An asclepion[2] consisted essentially of a building

[1] In reference to the asclepia or asclepions, as he calls them, Draper says: "An edict of Constantine suppressed those establishments." And again: "The asclepion of Cnidus continued until the time of Constantine, when it was destroyed along with many other pagan establishments." History of the Intellectual Development of Europe, pp. 386 and 397. Revised edition. New York, 1876.

[2] Asclepion is from Asclepios, the Greek form of the name of the god of medicine. In Greek it is *ἀσκληπιεῖον*, meaning Temple of Asclepios. Æsculapium is of similar meaning.

with a more or less hygienical site, usually in the country and near a fountain,[1] sometimes a mineral one, in which the arts of healing were practiced by priests or disciples of Æsculapius, called asclepiades. In all, the influence of the god was generally believed to be an essential factor; and hence in each an image of him was to be found. But the fully-equipped institution had many appliances, as has been shown in the account given of the one at Epidaurus. Arrangements for exercises, baths, and other means which were brought to bear to restore people to health were duly provided and were in many instances elaborate.

The asclepiades claimed that they were descended directly from the god of whom they were the disciples. They were not, at any time, mere priests; that is, ministers of religion. Indeed, it has been asserted that "there is no sign in the Homeric poems of the subordination of medicine to religion."[2]

The asclepiades constituted a special class, and they were oath-bound to preserve the mysteries of the art from the uninitiated. The oath is preserved in the Hippocratic Collection,[3] and is usually called by his name. It begins thus: "I swear by Apollo, the physician, and Æsculapius, and Health, and All-Heal,[4] and all the gods and goddesses that, according to my ability and judgment, I will keep this oath and this

[1] Vitruvius, who flourished in the first century before our era, expresses the opinion that "natural consistency" suggests the selection of situations affording the advantages of "salubrious air and water" for "temples erected to Æsculapius, to the goddess of health, and such other divinities as possess the power of curing diseases." It materially helped the divinities. See second edition of his work on Architecture, p. 11, by Joseph Swift. London, 1860.

[2] Encyclopædia Britannica, ninth edition.

[3] See William Adams' edition of the Genuine Works of Hippocrates. Two volumes. London, 1849.

[4] Hygeia and Panacea, both daughters of Æsculapius.

stipulation." In it occurs this passage: "I will follow that system of regimen[1] which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous." Here is another: "With purity and with holiness I will pass my life and practice my art." Cutting for the stone is left to those who make a special business of it. What is learned about patients, in the exercise of the art, which should be kept secret is not to be divulged. Mr. Adams well says that it is most honorable to the profession that so ancient a document pertaining to it as this, "instead of displaying narrow-minded and exclusive selfishness, inculcates a generous line of conduct, and enjoins an observance of the rules of propriety and of the laws of domestic morality."[2]

It has been said, in a learned article[3] on ancient medicine, that "the asclepiadæ of Greece were the true originators" of scientific medicine. This claim might be questioned, but it is, doubtless, in the main just. Certainly all physicians were not connected with asclepia; and in later times the asclepiades proper were avoided by the more intelligent and rational.

Unfortunately, the records of the practice of the asclepiades have been almost entirely lost. This is to be regretted, and more especially because what is preserved is of a decidedly high order of merit.[4] How-

[1] Treatment.

[2] *Op. cit.*, p. 777.

[3] In Smith's Dictionary of the Bible.

[4] Most of the votive inscriptions which have been discovered by Mr. Kavvadias at the Epidaurian Asclepion do not fortify this opinion, but they do not serve to disprove it, because others of a different character may be found. Moreover, the practice there may have been less scientific than at Cnidus, Cos, and elsewhere. However, the inscriptions brought to light by Mr. Kavvadias are, generally speaking, poor enough. One runs thus: "Cures of Apollo and Æsculapius. Concerning Kleo, who was *enceinte* for five years. This woman, after being *enceinte* for five years, came as a suppliant to the god, and lay down to sleep in the sacred cham-

ever, it is probable that at least the *crême* of the whole has been handed down to us by Hippocrates.

It seems certain that in the first "Prorrhetics" and the "Prænotiones Coacae," which are transmitted to us in the Hippocratic Collection, we have fragments and excerpts from the histories of diseases and cures which were formerly found on the votive tablets of the Coan Temple. From these records Hippocrates drew largely in composing his highly valuable "Book of Prognostics." In reference to the matter Adams says: "It is as clear as the light of day that Hippocrates composed this work from them."[1]

It is more than probable that, except for a short time at first, the system of treatment pursued by the asclepiades varied within wide limits; and it is equally certain that the superstitious element lessened as time passed. Between the principles of practice of Æsculapius and those of Hippocrates[2] there is a very wide difference. Those of the former will be given later; but of those of the latter I may say here that they were essentially scientific.[3] To Hippocrates every disease had a natural cause, and was to be cured by natural

ber. As soon as she had gone forth from it and from the sanctuary, she gave birth to a male child. When the baby was born, he washed himself in the fountain and set to creeping around his mother."—See Ἐφημερὶς Ἀρχαιολογική, No. 4, 1883.

[1] Genuine Works of Hippocrates (Adams), p. 229.

[2] "The Father of Medicine" was, of course, one of the asclepiades. He was born, it is believed, in the year 460 B.C., and lived to be very old. His genealogy is preserved in his works. As given in Adams' edition, he is of the fifteenth generation, in a direct line, from Æsculapius. He was of the Podalirius branch. In this connection I may remark that, if Hippocrates took the oath of the asclepiades, he must have given it a decidedly liberal interpretation, for it looks as if he divulged to the whole world all the mysteries of the healing art of great consequence then known.

[3] It is improbable that Hippocrates was but a fair example of the asclepiades of his day. He has said himself: "Physicians are many in title, but very few in reality." (The Law.)

means. He was wont "to consult Nature herself about Nature," as Bacon has somewhere wisely advised. He did not attribute any morbid condition to any spiritual power, good or bad, and hence in his practice did not resort to conjuration or any related means of cure. Even of epilepsy, the so-called "sacred disease," he said: "It is thus with regard to the disease called sacred: It appears to me to be nowise more divine nor more sacred than other diseases, but has a natural cause from which it originates like other affections." And again: "Men regard its nature and cause as divine, from ignorance and wonder."[1] As regards holding disease to be divinely inflicted, he very properly remarks: "I do not count it a worthy opinion to hold that the body of man is polluted by God."[2]

Not only in the principles of medicine, but in its practice, Hippocrates was wonderfully sound, even when judged from the stand-point of the art in our day. In truth, for extent and profundity of medical knowledge and philosophy, between him and what modern would one think of instituting a comparison? Sydenham has been likened to him; but, although I am an admirer of the English physician, I do not hesitate to say that he was neither in breadth nor depth any such man as the Coan. As a writer on the prevention and cure of disease, Hippocrates remains *facile princeps.*

Let it not be hastily supposed that my admiration for Hippocrates is unreasonably great. His works are truly a surprise to even the well-read modern. Very many of the so-called discoveries of recent times may be learned by turning to them. I speak advisedly. I will cite instances:—

[1] On the Sacred Disease. [2] *Ibid.*

Thus, of the treatment of open sores, he says: "In these cases no part is to be exposed to the air." Dressings of "wine and oil" and "pitched cerate[1]" are directed to be used.

Again, in treating fractures, in connection with certain splints, he advises that "a soft, consistent, and clean cerate should be rubbed into the folds of the bandage;"[2] and he says, "If you see that the bones are properly adjusted by the first dressing, and that there is no troublesome pruritus in the part, nor any reason to suspect ulceration, you may allow the arm to remain bandaged in the splints until after the lapse of more than twenty days."[3]

Still again, in regard to the reduction of a dislocation at the hip-joint, he says, "In some the thigh is reduced with no preparation, with slight extension, directed by the hands, and with slight movement; and in some the reduction is effected by bending the limb at the joint and making rotation."[4]

In the three preceding paragraphs we have the practical side of the germ theory of disease, the permanent dressing of fractures, and the reduction of dislocations by manipulation.

I might go on and recount numerous other matters alleged to be new, and of which we hear much; but it is not necessary. I may add, however, a few items of interest:—

"Bleed," says the old Greek, "in the acute affections, if the disease appears strong, and if the patients be in the vigor of life, and if they have strength." Has any modern spoken more wisely on the subject?[5]

Here is a statement worthy of the attention of un-

[1] On Fractures. [2] Iatrum. [3] On Fractures.
[4] On Articulations. [5] On Regimen in Acute Diseases.

balanced theorists of our day: In fevers and pneumonia, heat "is not the sole cause of mischief."[1]

He gives directions for the use of effusions with "water of various temperatures" in "cases of pneumonia," of "ardent fevers," and of other diseases. This treatment, he thinks, "suits better with cases of pneumonia than in ardent fevers."[2]

In that inimitable book, his "Aphorisms," it is said: "In general, diseases are cured by their contraries." There is no exclusive allopathy or homœopathy, or dogma of any kind, in that statement; it is the sentiment of a scientific physician.

Medicine was evidently far advanced in the days of Hippocrates;[3] and he was certainly a learned and sensible practitioner of it, even the "Prince of Physicians," as Galen, I think, somewhere characterizes him, as well as one who did much to make it what he pronounced it himself to be, namely, "of all arts the most noble."[4]

[1] On Ancient Medicine.
[2] On Regimen in Acute Diseases.
[3] In the fifth century B.C.
[4] The Law.

CHAPTER VI.

THE GRECIAN GOD OF MEDICINE.

DURING most of the earlier part of their history it is safe to say the Greeks regarded Apollo as their main god of medicine. Being possessed of the eminent qualities of a sun-god, replacing Helios as such, and both mighty and popular, this was to be expected. Nothing could be more natural than to accord to a deification of the orb of day a direct concern with matters pertaining to life and death.[1] Who so blind and stupid as not to see and know that all vital activity is intimately connected with the presence and movements (apparent) of this great light- and heat- producing heavenly body!

In an old Chaldean hymn the power of the sun over health and disease is recognized. He is petitioned to relieve a patient. The petitioner, after saying that "the great lord, Hea, had sent him," continues:—

> "Thou at thy coming, cure the race of man;
> Cause a ray of health to shine upon him;
> Cure his disease."[2]

However, the reader of Homer is well aware that medical affairs were regarded by the Greeks as subject to the will of Phœbus. The epidemic which affected the Grecian forces, spoken of in the beginning of his great work, was held to be caused by the god. Being moved to anger by the words of his daughter-robbed priest—

[1] It is a beautiful Biblical passage (date about 400 B.C.) which reads "The sun of righteousness shall arise with healing in his wings." Malachi, iv, 2.

[2] See Chaldean Magic, p. 180. François Lenormant. London, 1877.

"Latona's son a dire contagion spread
And heap'd the camp with mountains of the dead."[1]

Chryses, having received the maiden[2] back from her kingly abductor,[3] then addressed Apollo again, saying, among other things:—

"If fir'd to vengeance at thy priest's request,
Thy direful darts inflict the raging pest,
Once more attend! Avert the wasteful woe
And smile propitious and unbend thy bow."[4]

The prayer was heard and answered as desired.

Surgical as well as purely medical aid was sought and received from Apollo. Thus, when the Lycian chief, Sarpedon, was killed, Glaucus, himself sorely wounded and unable to protect his friend's remains, petitioned the "god of health," the "god of every healing art," and

"Apollo heard; and suppliant as he stood,
His heavenly hand restrain'd the flux of blood;
He drew the dolours from the wounded part,
And breath'd a spirit in his rising heart."[5]

One of the names often applied to Apollo,[6] and subsequently to his son,[7] was distinctly medical, viz., Pæon, or Paieon.[8] Homer always uses it in referring to the physician of the Olympian gods, as where he speaks of the Pharian race as "from Pæon sprung."[9] "Pæonian herbs"[10] is the phrase used by Virgil in his account of the restoration to life of Hippolytus. And this leads me to say that Apollo was believed to have a special knowledge of medicinal plants. By Ovid he is represented as saying:—

[1] Iliad, i. [2] Chryseis. [3] Agamemnon. [4] *Op. cit.*, i. [5] Iliad, xvi.
[6] It was doubtless from the idea of deliverance from suffering that the term Pæon was applied to Thanatos, or Death, as was sometimes done.
[7] Æsculapius. [8] Παιών or Παιήων, savior, healer, or physician.
[9] Odyssey, iv. [10] Æneid, vii.

"What herbs and simples grow
In fields, in forests, all their power I know."[1]

It may be further said that Apollo always continued to have healing powers accorded him. No more proof of this is wanting than the first clause of the Hippocratic oath—"I swear by Apollo, the physician."

It would seem to have been about the time of the Trojan war that the special god of medicine began to be viewed as such by the Greeks. Strong reason for so believing is found in the fact that Homer refers to Æsculapius as simply "a blameless doctor,"[2]—a mortal, the adjective used never being applied to a god. A well-informed writer remarks that "the kernel out of which the whole myth has grown is, perhaps, the account we read in Homer."[3] This opinion is open to question. Even the title of Archegetes, or Primeval Divinity, was sometimes given to Æsculapius, and, indeed, under that title he was worshipped by the Phocians in a temple situated eighty stadia[4] from Tithorea. This name was also given, it must be said, to Apollo, from whom probably it was received by the son. I may add here the suggestion of the Abbé Banier, that likely a distinguished physician, called Æsculapius,[5] of the age of Hercules and Jason, being highly honored, was in time confounded

[1] Metamorphosis, i. [2] Ἰητὴρ ἀμύμων.

[3] Smith's Dictionary of Greek and Roman Biography and Mythology.

[4] The stadium equals 600 feet; 625 Roman or 606¾ English feet make a stadium.

[5] Cicero informs us that there were three distinguished physicians of the name. "The first Æsculapius," says he, "the god of Arcadia, who passes for the inventor of the probe and the manner of binding up wounds, is the son of Apollo. The second, who was slain by a thunderbolt and interred at Cynosura (in Arcadia), is a brother to the second Mercury. The third, who found out the use of purgatives and the art of drawing teeth, is the son of Arsippus and Arsinoë. His tomb may be seen in Arcadia and the grove that is consecrated to him, pretty near the river Lusius." On the Nature of the Gods, iii.

with the old Phœnician and Egyptian god, Esmun; "so that in process of time the worship of the latter came to be quite forgotten, and the new god substituted altogether in his room."[1]

Galen expresses doubt whether the divinity of Æsculapius was the result of a gradual development from a human basis; but Pausanias says: "That Æsculapius was from the first considered as a god, and that his fame was not owing to length of time, I find confirmed by various arguments, and even by the authority of Homer, in the following verses, in which Agamemnon thus speaks of Machaon:—

> 'Talthibius, hither swift, Machaon bring,
> Who from the blameless Æsculapius sprung;'[2]

which is just as much as if he had said, 'Call a man who is a son of a god.'"[3]

In the indulgence of their myth-forming fancies it was very reasonable, very wise, on the part of the Greeks to make Æsculapius the offspring of Apollo. If the god of medicine be viewed as a personification of the healing powers of nature, what more rational, as has been observed, than to take him to be "the son, the effects of Helios, Apollo, or the sun."[4]

The mythological history of the Grecian god of medicine is strange and interesting. One must know it, or he will remain in the dark about many things bearing on the symbolism and other features of the physician's art.

Æsculapius was the result, so the story runs, of a

[1] The Mythology and Fables of the Ancients Explained from History, vol. iii, p. 160. London, 1740. Translated from the French. The account of Æsculapius given is one of the best I have met with.

[2] Iliad, iv, lines 193–4. *Vide supra.*

[3] Itinerary of Greece (translation), vol. ii, p. 212.

[4] Smith's Dictionary of Greek and Roman Biography and Mythology.

criminal *liaison* between Apollo and a young virgin, named Coronis, a native of Thessaly—something which the myth-makers apparently did not regard as discreditable. The morals of many of the gods were exceedingly bad. "Our manners have been corrupted by communication with the saints,"[1] is a candid remark of Thoreau. It would appear that the ancients were corrupted by communication with the gods.

It is recorded of Coronis that she was, like too many of the sex, fickle, and did not prove faithful to her divine paramour; she stealthily cultivated a criminal intimacy with an Arcadian youth, named Ischys. The fact of her infidelity becoming known to Apollo, either through a message of a raven,[2] or his own divine powers, he, naturally enough, was greatly displeased. And the wrath of the divinity was followed by a series of remarkable events.

At this point it may be well to state that the parentage of Æsculapius was a question which early excited attention. A belief existed that "he was the offspring of Arsinoë" and "a citizen of the Messenians," as Pausanias informs us. Apollophanes, an Arcadian,[3] being interested in the matter, went to Delos, and, putting the question of its truth to the Pythian deity, received this reply:—

> "O Æsculapius! source of mighty joy
> To mortal natures; whom Coronis fair,
> Daughter of Phlegyas, once with me conjoin'd,
> In Epidauria's barren region bore."[4]

According to this dictum, he was, indeed, born in Epidaurus. Pausanias, by way of proof of the truth of it, says: "I find that the most illustrious rites of

[1] Walden, p. 85. [2] The Greek for raven or crow is κορώνη.
[3] Itinerary of Greece (translation), vol. ii, p. 211. [4] *Ibid.*

Æsculapius were derived from Epidaurus."[1] From that point the worship seems to have spread. It is said, however, by Strabo,[2] that his birthplace was Tricca, in Thessaly.[3]

However, to return to our story: the time of the delivery of Coronis was not far off, when the news of her perfidy reached Apollo. Notwithstanding this, he, being seemingly under the influence of the "green-eyed monster" to an ungodly degree, cruelly resolved on having revenge at once. Artemis,[4] the goddess of chastity, was directed to slay the unfaithful maid with a thunderbolt, and the order was duly executed. On coins of Pergamus the unfortunate Thessalian appears entirely veiled.

After the fatal thunderbolt had descended on the *enceinte* Coronis, and her body was being consumed in the merciless pyre, Apollo's paternal feelings became stirred, and saying, as Pindar tells us,

> "I may not bear to slay my child
> With his sad mother, sin-defiled,"[5]

proceeded forthwith to save his unborn offspring.

To what manner of operation did he resort? I leave it to some all-knowing specialist to find out; but, at any rate, by some method or other, the child was rescued.[6] Another version of the affair, preserved by Pausanias, robs the god of any possible skill as a gynæcologist—surgical, I mean. According to it, when Coronis was undergoing cremation, after being slain by Artemis, "the

[1] Itinerary of Greece (translation), vol. ii, p. 211. [2] Geography, xiv.

[3] According to Homer, it was at Tricca and round about that his two sons bore sway. Iliad, ii.

[4] Diana. [5] Pythian Ode, iii.

[6] As Grimm remarks, children brought into the world, like Macduff, by abdominal section, usually become heroes. Teutonic Mythology (translation), p. 383.

boy is said to have been snatched by Hermes from the flames."[1] And of this I may observe that it was not inappropriate to have Hermes, the Grecian metamorphosis of the thrice-great god of wisdom and knowledge of the Egyptians, present at the unnatural *accouchement*, and in such close relation to Æsculapius at the very beginning of his wonderful career.

It was, then, the unhappy fate of Æsculapius to be an orphan from his birth, if birth he had, to speak correctly; and it is possible that his advent was decidedly premature—in a medical sense. Apollo was puzzled to know what to do with his tender son; nor did he do for him all that could be expected, for baby Æsculapius was heartlessly exposed on Mount Titthium. Here the little unfortunate fell into the keeping of a friendly goat and dog. The goat gave the precious *enfant trouvé* nourishment,[2] as Amalthea had done Zeus, and the dog kept guard over him.[3] Splendid services, indeed, on the part of two humble animals, in the interest of medicine and humanity!

On Epidaurian coins, the infantile god of medicine is appropriately represented under a she-goat on Mount Titthium, with Aresthanas approaching. This person was the shepherd of whom Pausanias says that, coming to the rescue, "he beheld a splendor beaming from the infant, and, thinking that it was something divine, as indeed it was, departed from the place. But a report," he continues, "was immediately spread through every

[1] Itinerary of Greece (translation), vol. ii, p. 210.

[2] Because of this occurrence it is said that the name of the Mount was changed from Myrtium to Titthium, from Τιτθή, a nurse.

[3] Heroes were often indebted to dogs for kind offices. The Hindu Saramâ is the bitch which aids such when lost in the forests, grottoes, or darkness. See De Gubernatis' Zoological Mythology, p. 98. Grimm even says: "A widely-prevalent mark of the hero-race is their being suckled by beasts or fed by birds." Teutonic Mythology, p. 390.

land and sea that such as were afflicted with any kind of disease were healed by the boy, and that even the dead were raised to life."[1] The reader need hardly be informed that accounts parallel to this are common enough in ancient records.

How it happened that the child of Coronis, a Thessalian, first saw the light in Epidauria, a country which became particularly sacred to him, is a question which should be answered. It appears that Coronis came there with her warlike father, Phlegyas, who gave, as a reason for his visit, a desire to see the country, but, "in reality," Pausanias says, "that he might inspect the multitude of the inhabitants, and learn whether there was a great quantity of fighting men."[2]

Pindar states that Apollo, on rescuing his child, bore him at once to Chiron—

> "To learn of human woes the healing lore,"[3]

which does away with the fabled discreditable exposure of him; but whether this be so or not, in progress of time, he did put him under the care and instruction of "the beneficent leech,[4] Cheiron (to use the archaic expression of the historian, Grote[5]), the Thessalian Centaur, or fabulous monster, whose figure from the waist down was like the body of a horse.[6] Under the direction of this strangely-formed creature, Æsculapius proceeded to

[1] Itinerary of Greece (translation), vol. ii, p. 210. [2] *Ibid.*

[3] Pythian Ode, iii.

[4] Leech was formerly a common name for the physician; such was the meaning of the Anglo-Saxon *læce* and the Gothic *leikeis*.

[5] History of Greece, vol. i, p. 179.

[6] Lenormant says that the Oriental Gandarvas, or celestial horses, which represented the rays of the sun, gave the name and the first idea of the Grecian Centaurs. Ancient History of the East, vol. ii, p. 13. Mr. Sayce holds that "Hea-bani, the confidant and adviser of Gisdhubar, is the Kentaur Kheiron." The Ancient Empires of the East, p. 156. New York, 1884.

study the medical virtues of plants; for Chiron was a great herbalist, being called by Homer, in the words of Pope, "the sire of pharmacy."[1] In time the pupil exceeded the teacher in his knowledge of drugs.

Chiron was regarded, Pindar tells us,[2] as the son of Saturn and the sea-nymph Philyra; and hence was a brother of Zeus. Saturn changed himself into a horse to conceal his amour with the nymph from his wife, Rhea. This would account for the form of the Centaur.

Chiron lived in a cave on Mount Pelion, in Thessaly. It will be remembered that it was from there that he got the ashen spear[3] for Peleus, which the son brought into use, a ponderous spear, which—

> "Stern Achilles only wields,
> The death of heroes and the dread of fields."[4]

According to Homer,[5] Hercules received instruction in medicine from Chiron; and it is stated, by Pindar,[6] that Jason was another pupil of his. With these Æsculapius went, as physician, on the celebrated Argonautic expedition.

At the end of his career, the Centaur became, it is said, the sign of the zodiac, Sagittarius.[7]

[1] Iliad, xi. [2] Pythian Ode, vi.

[3] This may have been a fraxinus, or true ash,—a famous tree in mythical history. The mountain-ash, or rowan-tree (*Pyrus aucuparia*), however, has been believed from time immemorial to possess great magical powers. It averted fascination, evil spirits, and diseases. Faith in it is still widespread. See Curiosities of Indo-European Tradition and Folk-lore, by Walter K. Kelly, p. 158 *et seq.* London, 1863.

[4] Iliad, xix. [5] *Ibid.*, xi. [6] Nemean Ode, iii.

[7] It is worthy of remark that, while the form of Chiron, or Cheiron, serves as a pharmacist's symbol, he has, probably, bequeathed his name to the healer of wounds and the like,—the surgeon. The word surgeon is from the Latin, *chirurgus*, or, rather, the French, *chirurgien*. Chirurgeon has some standing as an English word. The Latin, *chirurgus*, is usually said to have come from the Greek, χειρουργικος, a word compounded of χειρ, the hand, and ἐργος, worker, meaning one who works with the hand. It seems likely, however, that the name of the Centaur, χειρων, suggested the application of the word to the surgeon.

In treating the sick, Æsculapius soon proved himself a master. His patients did not die, and it appears that he recalled a few from "the shades below." But, sad to relate, the great success he had in curing the sick, and especially his recalling some from the other world, led to his destruction. Pluto, the god of the nether regions, not wishing a sparse population,[1] became displeased with him and complained to Zeus, who, probably believing that he was becoming too powerful, so much so as to make man undying,[2] cut short his career with a thunderbolt,—a tragedy which caused his father, Apollo, to wander away to the land of the Hyperboreans and to shed tears of gold. At the request of Apollo he was placed among the stars.[3] The eighth day of the Eleusinian Mysteries was devoted to sacrifices to him, and was called Epidauria.

From what Virgil says, it would seem that it was not because of the direct exercise of his power to restore life that Æsculapius was destroyed, but because of the degree of perfection to which he had brought the medical art. The event, "the fable,"[4] as Pliny designates it, is connected with the restoration of Hippolytus or Virbius, and is thus referred to by the Roman poet:—

> "But chaste Diana who his death deplor'd
> With Æsculapian herbs his life restor'd;
> Then Jove, who saw from high with just disdain
> The dead inspired with vital breath again,
> Struck to the centre with his flaming dart
> The unhappy founder of the god-like art."[5]

The plan of treatment pursued by Æsculapius was variable. After speaking of the sick, "a host forlorn" that flocked to him, Pindar says:—

[1] Diodorus, iv; Pindar's Pythian Ode, iii.
[2] Apollodorus, ii.
[3] Hyginus. Poet. Ast., ii.
[4] Natural History, xxix.
[5] Æneid, vii.

"Some spells brought back to life;
These drank the potion plan'd; for these he bound
With drugs the aching wound;
Some leaped to strength beneath the helpful knife."[1]

The lines just given certainly serve to disprove the statement of Pliny, that in Homeric times "the healing art confined itself solely to the treatment of wounds."[2] It is doubtless true, however, that nothing is said in Homer's works about particular diseases.

It has been held that Æsculapius, like More's Utopians, did not think it wise to bring to bear the art of healing in the case of any one who might not be restored to health and to usefulness to himself and others. Says Plato: "He thought medical treatment ill bestowed upon one who could not live in his regular round of duties, and so was of no use either to himself or to the State."[3] The great philosopher accordingly regarded him as "a profound politician." For, in his ideal state, this celebrated theorizer would have physicians "bestow their services on those only of the citizens whose bodily and mental constitutions are sound and good, leaving those that are otherwise, as to the state of their body, to die, and actually putting to death those who are naturally corrupt and incurable in soul."[4] Some excellent reasons might be advanced in favor of such a harsh policy, but, while human love of life and human sympathy remain as now, it will never be brought into play.[5] As an ideal physician, Æsculapius could hardly have been an advocate of it.[6]

[1] Pythian Ode, iii.
[2] Natural History, xxix.
[3] Republic, b. iii.
[4] *Ibid.*
[5] This policy is inculcated in the "Institutes of Menu." The incurable Hindu is directed to proceed toward the invincible northeast, living on air and water. Exposure in battle is also advised.
[6] Herodicus introduced the new practice. He was a sickly trainer, and did what he could to keep well; "and so," says Plato, "dying hard by the help of science, he struggled on to old age." Republic, b. iii.

I may say a word about the charge of Pindar, that the efforts of Æsculapius to recall the dead to life were inspired by temptation with gold. The poet says:—

> "Alas! that filthy gain can blind the wise!
> The glittering gold betrayed the noble leech,
> From the dark prison-house to bid arrive
> A captive thrall of death!
> But Jove with wrathful hand refused to each
> The hallowed breath.
> Down came the bolt of fire."[1]

Making such an ugly charge is probably unjust to the great healer. The historian, Grote, thinks so, and expresses the opinion that Pindar was disposed "to extenuate the cruelty of Zeus by imputing guilty and sordid views to Æsculapius."[2] Long ago the accusation was met by Plato. Says he: "While they[3] assert that Æsculapius was the son of Apollo, they declare that he was induced by a bribe of gold to raise to life a rich man who was dead, which was the cause of his being smitten with a thunderbolt. But we, with our principles, cannot believe both these statements of theirs. We shall maintain that, if he was the son of a god, he was not covetous; if he was covetous, he was not the son of Apollo."[4] He was the son of Apollo.

To conclude this imperfect sketch of the life of Æsculapius, I may add that he was married, as every wise as well as respectable physician should be,[5] and, as was desirable in an exemplar, the father of at least six children,—two sons and four daughters. The two sons, Machaon and Podalirius, taught by their "parent

[1] Pythian Ode, iii. [2] History of Greece, vol. i, p. 159.
[3] Pindar and various tragedians. [4] Republic.
[5] Says Ahura-Mazda: "The man who has a wife is far above him who begets no son; he who keeps a house is far above him who has none; he who has children is far above the childless man." Zend Avesta.

god," as Homer informs us, became "famed surgeons," "divine professors of the healing art,"[1] and were also distinguished warriors under Agamemnon. Of the daughters, Hygeia, Panacea, Jaso, and Ægle, the first became the goddess of health, of whom more anon.

[1] Iliad, ii.

CHAPTER VII.

THE IMAGE OF ÆSCULAPIUS.

A SIMPLE image of a god may be regarded as a symbol. When the image has connected with it one or more figures to indicate the qualities or functions of the divinity, we have then, strictly speaking, an allegorical representation. Æsculapius was sometimes shown in the one way and sometimes in the other. Thus, he was occasionally to be seen at Rome, and elsewhere, in the form of a serpent; and, at the Epidaurian Grove, for example, as a man having in connection with him a serpent, a dog, and other things.

As is implied in what I have just said, there was no set, invariable mode of portrayal of Æsculapius. This fact should be clearly understood. But let it not be supposed that it is by any means singular. It will occur to the well-informed reader that the same holds true in regard to Zeus, Apollo, Venus, and, indeed, all other divinities. Says Müller: "The so-called ideals of the Grecian gods are not types; they do not preclude the freedom of the artist; they rather contain the strongest impulse to new, genial creations."[1] It is, perhaps, self-evident that a statue of a god must necessarily be quite ideal; and, of course, an ideal is without absolute permanency. Still, it remains true that in the case of Æsculapius, as well as that of every other deity, there was a more or less definite conventional way of representing him. This, however, was largely dependent on the presence of attributes. Thus, it

[1] Hand-Book of Ancient Art and its Remains, p. 12.

would be not only inconsistent with custom, but almost futile, to attempt to delineate him without the presence of a serpent.

The most magnificent representation of Æsculapius was the one at Epidaurus. A description of it has already been given. This fine work of art disappeared at an early day. The vandals could not be expected to spare it; the gold in its composition was fatal to its permanency. It was borne on coins of Epidaurus. According to Strabo,[1] a copy of it was taken to the Galatian town, Pessinus, not Rome, as is often said. Several other places were similarly favored.

There was a very celebrated statue of Æsculapius at the renowned Asclepion of Pergamus, the production of the artist Pyromachus, as well as one similar to that of Epidaurus. It became the prevailing type in art. In it the god was represented as a mature man of benevolent expression, with his rather long hair bound with a fillet, and in his right hand he held a staff enwreathed with a serpent. He wore a himation[2] drawn tight over the left arm and breast. The whole right side from the waist up was uncovered. His attitude was that of a person ready to render assistance. "We can recognize," says Müller, "the figure with tolerable certainty as the most usual representation of the god on numerous coins of Pergamus."[3]

The well-known statue of Æsculapius at Berlin resembles that at Pergamus; and the same is true of one at Florence, and others. That of Berlin has the serpent-wreathed staff, or support, placed on the left side. This appears to have been frequently done. An instance of it I have observed in a gem bearing Æscula-

[1] Strabo, xii, 5.
[2] A toga of limited dimensions.
[3] Ancient Art and its Remains, p. 131.

pius and Hygeia, taken from a tomb at Thron,—a piece of work of the Roman period. It is shown in General Di Cesnola's interesting work.[1]

While Æsculapius was made to appear aged in some instances, as in the Epidaurian representation, he was sometimes presented in youthful form, and beardless, like his father, Apollo. And this reminds me of the story told of Dyonysius, King of Sicily, that, on conquering the Morea, he ordered the beard to be taken off the Epidaurian statue of the god, for the reason that it was unbecoming and unjust for the son to have a beard when the father had none. Possibly if it had not been a golden one it would not have been molested.

I may venture to say that both aged and youthful representations of Æsculapius are open to criticism. An ideal physician should be, as in the statue at Pergamus, a man in his prime, or, in other words, mature, but neither young nor old. The immature man is apt to be defective in judgment, and the superannuated one is nearly always of excessively routine practice and ignorant of recent advances in his profession.

By way of conclusion, I will say a few words about the famous colossal head of Æsculapius, originally colored and decorated with a bronze wreath, now in the British Museum, where it has been since 1866. It represents, with marked freedom and breadth of execution, a finely-developed man of middle age, with a cast of countenance similar to that of the Phidian Zeus. The beard is of moderate length and is waved like the somewhat long hair. This is really one of the noblest remnants of Grecian art. Nichols, in whose work[2] an engraving of it is given as a frontispiece, just

[1] Cyprus. London, 1877.
[2] Handy-book of the British Museum, 1870.

as it is in this one, regards it "as scarcely less remarkable" than the celebrated "Venus of Milo" in the Louvre, both of which were found, the former in 1828, on the island of Melos. It is considered to be the work of an artist of the Macedonian period, about B.C. 300,—a time when the Greek sculptor had attained perfect mastery of his art.

CHAPTER VIII.

THE ÆSCULAPIAN STAFF AND SERPENT.

THE staff[1] and serpent of Æsculapius being of special emblematic significance, I deem it proper to speak of it at some length. The confusion of ideas which appears to prevail extensively in regard to it implies that a definite, explicit account of it is much needed.

Although, as will be remembered, Ovid makes Æsculapius refer to his serpent-enwreathed staff when addressing the commission which came from Rome to Epidaurus, in the famous representation of him given there, none was present. The poet may possibly have been misled by what had become familiar to him at home; for one was to be seen in connection with the statue of the god at Rome. It is probable, however, that it was a common occurrence for a living serpent, one of the species kept and viewed as sacred in the Hierum, to climb the staff in the hand of the Epidaurian statue.

It is very likely that the staff bearing a serpent became a characteristic emblem of the god of medicine through the great work of the sculptor, Pyromachus, at the Asclepion of Pergamus, which I have already described. The appropriateness of it was widely recognized, but it was not always adopted, as is attested by the remains of ancient art.

Apart from the serpent, the import of which will be fully treated of in the succeeding chapter, the staff as an attribute of Æsculapius merits study. Like many

[1] *βακτηρίον*. A bacterion is now a disease-germ. A marked instance of how the sense of words may become changed.

other apparently simple things in art, it may stand for a great deal more than one would suppose on first view.

The object encircled by a serpent held in the hand of the Æsculapian statue by Pyromachus, at Pergamus, is evidently a walking-stick. The Epidaurian statue has a similar object in one of the hands, and the same is the case in many others. Hence, as the representations of the gods of the ancients had rarely or never anything but significant attributes attached to them, it is pertinent to ask an explanation of its presence. Was there an historical basis for it? In other words, was Æsculapius notoriously in the habit of carrying a staff? If so, it is possible that this was why Pyromachus, Thrasymedes, and other artists connected one with figures of him. But there is no special reason for believing that such was the case.[1]

FIG. 3.—CLUB OR STAFF OF ÆSCULAPIUS. (*From Maffei.*)

Then, did the artists place a staff in the hand of Æsculapius of their own accord to indicate the perambulatory character of the physician's calling? Such an attribute was doubtless deemed appropriate by them; but, before one could believe that they gave it on the score of apparent appropriateness, it would have to be shown that it was in the power of artists to design gods at pleasure,—something which could not be done. They evolved it, I may venture to say, from something allied in form.

[1] Of course, it is possible enough that Æsculapius carried a staff at times. The Greeks, however, were not so much given to the practice as some other peoples, as the Egyptians (see Rawlinson's Egypt and Babylon, p. 240. New York, 1885), or the Babylonians, of whom Herodotus (i, 195) says that "every one carries a walking-stick carved at the top into the form of an apple, a rose, a lily, an eagle, or something similar."

There is little or no ground for believing that the staff of Æsculapius was a wonder-working object. I am not aware that such a thing was placed intentionally in his hand by any artist. Hence, the references often made to the mystic wand of the god spring from misapprehension, a walking-staff being something very different.

One can obtain, I believe, from an examination of the Berlin statue and others,—in which Æsculapius is represented leaning on, or standing by, a post of variable thickness and more or less regular in shape,—a clue to an explanation of the origin of the staff. Between the two objects the difference is not great, certainly not radical; and as attributes they might be expressive of the same thing. The club shown in the picture (Fig. 3), from Maffei, might be viewed as intermediate.

Of course, I do not say that the prototype of the staff was the post present in some representations of Æsculapius, although the idea would not be entirely unreasonable. There is more ground for the opinion that both were, so to speak, the offspring of something else.

Any one familiar with the antique representations of Æsculapius, and who has also seen different ones of Apollo, might well be inclined to believe that both gods have essentially the same thing by their side, namely, a post with a clinging serpent. And when it is recalled that Æsculapius was the son of Apollo, the opinion might be advanced with some degree of reasonableness, that the emblem of the former was, in reality, that of the latter, somewhat modified.

Tracing thus the origin of the staff of Æsculapius to the related symbol possessed by his father, Apollo, it would not be satisfactory to rest here; one naturally

wants to know something about the latter. A few words, however, on the subject must suffice.

Although it was not an uncommon thing for artists to give posts by the side of statues, the one bearing the serpent in, say, the Apollo Belvedere, was, it is thought, meant to represent the Omphalos, to which the Grecians attached much significance.

The Omphalos,[1] in the form of a conical stone, was kept, and was present within historical times, as Strabo explicitly states, at Delphi, a place which, he says, "was supposed to be the centre of the habitable earth, and was called the navel of the earth."[2] Plato refers to Apollo as "the god whose seat is the middle point of the earth, its very navel."[3] According to a legend,[4] Delphi was esteemed the centre of the earth, because two eagles sent out by Zeus, one from the east and the other from the west, met at that point. Says Strabo: "In the temple is seen a sort of navel, wrapped in bands and surmounted by figures representing the birds of the fable."[5]

The etymology of the word *Omphalos* casts light on its meaning. Olympos, the mount of the gods, is a corruption of it. *Omphi-el*[6] is the oracle of the sun-god.

[1] Ὀμφαλός means navel. Umbilicus was derived from it. The Jews regarded Jerusalem as the navel of the earth (see Ezekiel, v, 5), and also every other people has flattered itself as having it within its possessions. (See chap. iv of Rev. Dr. William F. Warren's Paradise Found. Sixth edition. Boston, 1885.)

[2] Strabo, ix, 3.

[3] Republic, iv.

[4] See Pindar's Pythian Ode, iv.

[5] Strabo, ix, 3.

[6] In most of the Oriental countries, including Egypt, there was always more or less of a belief in one great divinity. "The Supreme Omnipotent Intelligence" of the Hindus was "a spirit by no means the object of any sense, which can only be conceived by a mind wholly abstracted from matter." (Institutes of Menu). El was a name given the Ineffable One by the Phœnicians and other peoples. Il or Ilu and Jaoh, the "being," the "Eternal," the "Jehovah" of the Hebrews, were designations of him used by the Babylonians, and from him, it was believed, the great trinity, Anu,

Al-omphi was used to designate hills, or mountains. Holwell says that the word came from Egypt, and was originally *Ompha-el*, and related to the oracle of Ham, or the sun.[1] The idea of a sacred mount or elevation is thus the original meaning of the word. And here I may say that in Hindu mythology considerable is said of a mountain encircled by a great serpent.[2]

Let it not be supposed that the reasons in favor of the idea that the Omphalos became the staff of Æsculapius are entirely insubstantial. Remains of ancient art furnish excellent proof of it. Müller says: "In a Pompeian picture, Æsculapius has beside him the Omphalos, which is entwisted with the well-known net, composed of στέμματα. We see from this that this symbol of Apollo was also transferred to his son. On the coins of the gens Rubria, likewise, it is not an egg, as is usually asserted, but *the Omphalos placed on a circular altar that is encircled by the Æsculapian serpent.*"[3]

To one versed in the history of Phœnicia and other Oriental countries, the Omphalos is very certain to be viewed in another light than as a symbol of a "high place," or mount[4] of worship. In the great Tyrian Temple of Baal Melkarth, which Herodotus went to see and admired much, and of which that of Solomon, or, rather, of Jehovah on Mount Moriah was almost a copy, even to the two pillars in front,—symbols of the sun-god,—were certain similar stones, carefully preserved and duly reverenced. These, it is well known, were of

Hea, and Bel emanated. Some, however, especially in early times, confounded him with Anu. Baal, the "Lord," was a common designation of him in Syria and elsewhere.

[1] Dictionary of Mythology. London, 1793. [2] Anantas.

[3] Ancient Art and its Remains, p. 519.

[4] The reader is doubtless familiar, through the Bible, with consecrated stones. A Maççeba was a necessary mark of every "high place." Jacob set one up (Gen., xxxi, 45).

procreative import; they were phallic in character.[1] Was the Omphalos of similar significance? There is little reason to doubt that it was often regarded in that light. "In the earliest times," says Müller, "a conical pillar, placed in the street and called Apollo Agyicus, sufficed to keep in remembrance the protecting and health-bringing power of the god."[2]

The staff, then, in the hand of Æsculapius may have had its prototype in the Phallus,—truly both an expressive and sublime symbol, when contemplated by pure, enlightened minds.

But, notwithstanding what I have said, one might present some arguments in favor of the view that the staff of Æsculapius had its true prototype in a magic wand or symbol of office. As will be pointed out later, the Accadio-sumerian, Silik-mulu-khi, the beneficent son of Hea, subsequently Marodach or Marduk of the Babylonians and Assyrians, a healing divinity, from whom the conception of Æsculapius may have partly sprung, carried a reed when attending to his duties.

[1] See Lenormant's Ancient History of the East, vol. ii, p. 230. A pillar, cone, or tree-stem, more or less ornamented, constituted the Ashêrah of the Syrians and others, which many of the Israelites long looked on with favor (see Numbers, xxv, and 2 Judges, xxii), and which is in the authorized version of the Bible translated "grove," as in the phrase, "the women wove hangings for the grove" (2 Judges, xxxiii, 7). It was the image of the goddess of fertility and life, the Istar of the Babylonians. The Baal-peor of the Moabites, Midianites, and others, and the Priapus of the Greeks and Romans were practically similar. I may add that the *Phallus* (derived from Apis, the Egyptian sacred bull), the *linga* of the Hindus, has been taken by many peoples as emblematic of the widely-worshipped, active, renovating power in nature, the sun; just as an oval or round figure, the *cteis* of the Greeks, the *yoni* of the Hindus, has been of the passive power, the earth. (See Cox's Mythology of the Aryans). The latter is the Mipleçeth, or "abominable image for an Ashêrah," spoken of in the Bible (1 Kings, xv, 13, and 2 Chronicles, xv, 16). The whole subject is well presented in a little book by Messrs. Westropp and Wake,—Ancient Symbol Worship. New York, 1874.

[2] Ancient Art and its Remains, p. 442.

I may say, too, that some hold the staff in the hand of the Egyptian Thoth to have been the original of the one accorded Æsculapius. Thus, in an excellent and finely illustrated essay, W. R. Cooper says: "When once the uræus had been associated with the idea of divinity, the Theban priests, rightly desiring to ascribe the gift of life and the power of healing to the Deity alone, significantly enough twined the serpent around the trident of Jupiter Ammon and the staff of Thoth or Hermes Trismegistus, the author of medicine, to imply the source from which that subordinate demigod's virtues were derived. From this, in the later periods of her history, Egypt remitted to Greece, along with the so-called forty-six hermetic treatises, the traditional *caduceus* or serpent-sceptre of Cyllenius[1] and Æsculapius, and, by subsequent transformation of the same deities into a feminine form, the snake and bowl of Hygeia, the goddess of health."[2] The "serpent-sceptre" which Egypt "remitted" to Cyllenius and to Æsculapius must have changed greatly in the passage, for it is anything but alike as seen in the hands of the two, and in neither case is it very similar to the asserted original. As well or better to take the staff and serpent to be the serpent-bearing tree,—the tree of life in miniature.

However, the fact remains, as already stated, that Æsculapius had no wand; that is, a rod of magic power. The very different personage, Hermes, as also Iris, the female messenger of the goddesses, had a wand or, rather, *caduceus*, which, strange to say, is taken by many to be a symbol of medicine; that is, the caduceus of Hermes, which is not of medical import at all, is

[1] A name given to Hermes.

[2] Transactions of the Victoria Institute, vol. vi, p. 329. London, 1873.

accorded to Æsculapius, who really had none. I repeat: there is no such thing as an Æsculapian wand, if wand be taken to mean a rod possessed of wonder-working power. But, of course, the serpent-bearing staff of Æsculapius is an expressive medical emblem.[1] I give an example after one in a plate in De Wilde's rare old book.[2] One might take the serpent to be a symbol of the god and the staff as symbolic of the moving of the physician from house to house in the exercise of his profession. Regarding the knots as expressive of difficulties in the art and practice of medicine is very fanciful, but not infrequently done. It is proper to observe, however, that the physician's staff in modern times is smooth, as will be pointed out later.

FIG. 4.—STAFF AND SERPENT OF ÆSCULAPIUS.

I deem it not amiss to give a cut of the caduceus of Hermes, in the hope of better removing misapprehension in regard to it. I give it as shown on the seal of the United States Marine-Hospital Service. It is an appropriate trade symbol, Hermes being the god of commerce[3] as well as the messenger of the gods; but it is more especially a symbol of peace, the god being the great peace-maker. (See Fig. 5.)

Traditional history relates that, in his rambles one day, Hermes saw two snakes fighting, and, laying his wand—which was originally an olive-branch received from Apollo—between them, was delighted to discover that it had the power of putting an end to the encounter,

[1] "Aaron's rod" is similarly constituted, but of different import.
[2] Gemmæ Selectae. Amsterdam, 1703.
[3] Mercury of the Romans was not much, except the god of commerce.

and of turning the two into friends. Hence the presence of the two serpents on the wand, the *virga* of the Romans. The tradition was likely in the nature of an after-thought. If the two serpents be taken to represent two contending persons, or nations, the mission of the ambassador with his wand or mace, the symbol of authority, is well indicated.

The two serpents on the caduceus have been taken to be male and female, and in an amatory mood.[1] Thus, says Aubrey, "The caduceus of Mercurie is adorned with two serpents in the posture of generation."[2] Pliny expressed an opinion similar to that of Aubrey.[3] This view was adopted by the London medical publishers, the Churchills, as will be seen on looking at the title-page of their books issued until recently. For instance, on the title-page of Pettigrew's "Superstitions Connected with Medicine and Surgery," issued in 1844, between two concentric circles surrounding the caduceus, are the words, *Irrupta tenet copula*, with *Literis medicina* on the serpents. Later, the first phrase was dropped and the other put in its place. For some years caduceus and all have very properly been left out.

FIG. 5.—THE CADUCEUS OF HERMES.

Hermes was accorded some functions by the Greeks which may well cause the physician to feel that it is not very complimentary to associate either him or the caduceus with his art, even if he be one who regards it

[1] The posture only approximates that assumed in the act of generation. In this act the two serpents, in the words of Aristotle, "are folded together with the abdomens opposite. . . . They roll themselves together so closely that they seem to be one serpent with two heads." Natural History, p. 103. Bohn's edition. London, 1862.

[2] Remains of Gentilisme and Judaisme, p. 38.

[3] Natural History, xxix, 12.

chiefly as a trade. Thus, Hermes, being an adept thief, was classed as the god of rogues. And this brings to mind the remark of some one, that, if medicine be a trade, it is the trade of all others the most exactly cut out for a rogue. Again, it was the function of Hermes, very like that of the archangel Michael, "to draw the souls from hollow graves," and "drive them down the Stygian waves," with his caduceus, as we are told by Virgil.[1] It is hardly a part of the physician's function, I submit, to drive souls "down the Stygian waves;" certainly, no one professes to do it.

[1] Æneid, iv.

CHAPTER IX.

ÆSCULAPIUS AND THE SERPENT.

THE serpent is undoubtedly the most significant of all medical symbols. Even Æsculapius assumed such a form, and was sometimes so represented by sculptors. It was to him the most sacred of all animals. Down through the ages this remarkable fact has been kept in view, and to-day it is almost as patent as ever.

Now, what is the explanation of the serpent as a symbol in medicine? How many medical men can say? Several explanations have currency; but I may candidly state that none of these are quite satisfactory; and I could not refer to an acceptable one in all the volumes in which such information might be expected to be found, with which I am familiar. Here, then, is a highly interesting and obvious fact to physicians, which few or none completely understand. Can I cast any light on it? Some, certainly; but just how much I must leave to the intelligent reader to judge, after perusing this brief but comprehensive chapter.

The serpent in medicine is meant to symbolize prudence, something very requisite in the physician. This opinion is one often expressed. It is not necessarily baseless. To be "as wise as a serpent," and to have "the subtlety of the serpent," are every-day phrases. The reptile has been accorded such qualities from a very early date. De Gubernatis remarks that in India it is still "revered as a symbol of every species of learning."[1]

It is often said that the serpent in medicine is meant

[1] Zoological Mythology, p. 406.

to symbolize the power of the art to produce renovation or rejuvenescence. This is not an absurd notion. The basis of it is believed to be the periodical renewal of the skin of the animal. This has long attracted attention. In a precious extant fragment of the very ancient Phœnician book of Sanchoniathon it is said of the serpent, "It is very long lived, and has the quality not only of putting off its age and assuming a second youth, but it receives a greater increase. And when it has fulfilled the appointed measure of its existence it consumes itself."[1] Referring to its reputed longevity, one intelligent writer says: "This quality was no doubt the cause why this animal entwined round a staff was the symbol of health and the distinctive attribute of the classical Æsculapius and Hygeia."[2] At any rate, to restore people to health and renew their age would be worthy employment for any one.

Another prevalent idea is, that the serpent in medicine is meant to symbolize convalescence. The remarkable change from a state of lethargy to one of active life, which the reptile undergoes every spring, affords some ground for it. It is taken advantage of in the device of the Rinovati Academy, as will be seen by turning to Mrs. Pelliser's interesting book.[3] Three serpents are represented on a bank gathering vigor in the sunshine, in the strengthening rays of Apollo. The educational interpretation is evidently quite as reasonable as the medical.

Of the three foregoing explanations of the symbolic import of the serpent in medicine, it must be said that

[1] See Cory's Ancient Fragments, p. 23. Edition by Hodges. London, 1876.

[2] McClintock and Strong's Cyclopædia of Biblical and Religious Literature.

[3] Historic Devices, Badges, and War-Cries. London, 1870.

there is good reason to hold that they are largely, or entirely, mere after-thoughts. Any one of ingenious mind could suggest several others just as worthy of acceptance. But, of course, such a mode of interpretation is decidedly illegitimate.

The idea has been advanced that the commonest of the species of serpent, *Elaphis Æsculapii*, described above, at Epidaurus, where the myth of the Grecian god of medicine first took definite shape, affords an adequate explanation of the association of the reptile with medicine. This may have had a little to do with it. I cannot admit, however, that it did more than, perhaps, emphasize somewhat the association. If such were its origin, the association could not be viewed otherwise than as incidental, and hence the serpent might be without any special meaning.

After referring to some strange curative virtue attributed to serpents, Pliny says: "Hence it is that the snake is consecrated to Æsculapius."[1] Here is a specimen of them given by the rather credulous old Roman: "It is a well-known fact that for all injuries inflicted by serpents, and those even of an otherwise incurable nature, it is an excellent remedy to apply the entrails of the serpent itself to the wound."[2] The principle is obviously the same as that illustrated in the old custom of applying a hair of the dog to cure the wound caused by the bite of the animal. In many parts of the world, the serpent has been accorded great virtue as a medicine, and in China and elsewhere such is the case even to this day. In fact, apart from the preposterous and numerous uses to which it is put by homœopathic doctors, is not the venom of the most deadly species declared by leading members of the profession

[1] Natural History, xxix. [2] *Ibid.*

to be a capital cure for various serious ills? However, Dr. D. G. Brinton quotes the rather striking observation of Agassiz, that "the Maues Indians, who live between the Upper Tapajos and Madeira Rivers in Brazil, whenever they assign a form to any 'remedio,' give it that of a serpent."[1] But, in spite of the wide belief in the virtue of the serpent as a medicine, I cannot accept the opinion of Pliny, that it affords a sufficient explanation of the matter in question. Its actual healing properties were assuredly too equivocal to merit such distinction. With all its virtues, *soma* itself received little or no more.

The fabled power of the serpent to discover herbs of curative virtues has been suggested as an explanation of the association of it with medicine. This is based on a traditional episode in the history of Æsculapius, which reminds one of the German story of the Snake Leaves, told by Grimm.[2] As regards the Æsculapian fable, it seems that on one occasion, while thinking what treatment to resort to in the case of a patient of his, Glaucus, a serpent appeared and twined itself around his staff; he killed it, whereupon another came bearing in its mouth an herb with which it restored the dead one to life. The god used the same herb with similar effect on the human subject.[3] The extremely miraculous feature of this explanation is an obstacle in the way of its acceptance.

It may be safely held that one must go back to a time long anterior to that of Æsculapius of the Greeks to acquire the true medical import of the serpent, which has been so closely associated with him. There is excellent reason for believing that we have in it a remnant of

[1] Myths of the New World, p. 3. New York, 1868.
[2] Household Tales. [3] See Hyginus. Poet. Astr., ii, 14.

that ancient and wonderfully wide-spread cultus, serpent-worship, which is still kept up by the Nagas[1] of India and others. Epidaurus was favorably situated for communication with Egypt, a country in which the serpent played a great religious rôle "from the very earliest period," as shown by both "written and monumental evidence," to use the words of Cooper,[2] as well as in later times, even within the Christian era, when the special sect of Gnostics, who called themselves Ophitæ, were in their glory. But, in truth, serpent-worship in Greece did not begin in the time of Æsculapius. Bryant maintains that it was brought into Greece by Cadmus, who, under the name of Taautus, or Thoth, took it also to both Egypt and Phœnicia from Babylonia.[3]

One can advance sufficient evidence to indicate with considerable conclusiveness that the Egyptians were in the habit of looking to a serpentine divinity for the cure of disease. In his interesting little book,[4] Sharpe gives a figure of a serpent wearing the double crown of Upper and Lower Egypt, on a pole or standard, a cut of which is reproduced (Fig. 6), which was carried in the periodical airing processions of the Egyptian divinities. Now, it is quite certain that Moses, and his people, too, were very familiar with this figure and its import; but, at any rate, we find him making an imitation of it, in his journey with the Israelites in the Wilderness; and for what purpose? The story is told in the Bible, and runs thus:

[1] The literal meaning of *nagas* is snakes. In his Indian Arts (London, 1882), Dr. Birdwood says: "The worship of the snake still survives everywhere in India, and at Nagpur was, until very recently, a public danger, from the manner in which the city was allowed to be overrun with cobras." p. 83.

[2] "Serpent-Myths of Ancient Egypt," in Transactions of the Victoria Institute, vol. vi, p. 321. London, 1873.

[3] Mythology, vol. ii, p. 460.

[4] Egyptian Mythology, p. 36. London, 1863.

"And Moses made a serpent of brass and put it upon a pole; and it came to pass that if a serpent had bitten any man, when he beheld the serpent of brass he lived."[1]

Verily, there is the Healer in essentially the same form in which he was sometimes embodied by the Greeks and Romans. Hence, it is sure that the serpent, as a medical symbol, took shape before the time of Æsculapius; long before, for Moses lived nearly four hundred years earlier than he, and, as we have just seen, it was likely far from new, far from being unfamiliar in his day. Fergusson has this to say of it: "It is the first record we have of actual worship being performed to the serpent; and it is also remarkable, as the cause of this adoration is said to have been its healing powers."[2]

FIG. 6.—THE SERPENT-HEALER.

The opinion has been widely entertained that the prototype of the brazen serpent of Moses, simply "Nehushtan"[3] in later times, was the *bonus dæmon*, the *Agathodæmon*[4] of the Greeks, Egyptians, and others. This "good genius" was regarded with great favor, and doubtless many were in the habit of according it power over disease. In the grove of Epidaurus, as in Indian temples and elsewhere among early peoples, the serpent

[1] Numbers, xxi, 9.

[2] Tree and Serpent Worship, p. 8. A splendid illustrated publication, issued by the government. It treats principally of East Indian matters. London, 1873.

[3] Brazen. See 2 Kings, xviii, 4.

[4] From the Greek ἀγαθός, good, and δαίμων, god, soul, fortune.

was the *genius loci*, and hence the Agathodæmon, the bringer of health and good fortune, the teacher of wisdom, the oracle of future events. One was kept in the Erechtheum, close to the sacred olive-tree, and in each of many other temples. One was to be found, according to Ebers, "in every temple"[1] in Egypt.

Evidence has recently been brought forward which goes to show that the serpent called the "good genius" in Egypt, in general, was in the part familiar to the Israelites, in the district of Suket, called also the dwelling-place of Ankh, "the Living One," whose chief city was Piton,[2] regarded as the simulacrum of the sun-god Ra, or, rather, Atum, Tum, or Tom, the sun as he sets.[3] Brugsch, who has studied the matter carefully, says: "The god Tom represents solely the Egyptian type, corresponding to the divinity of Piton, who is called by the name of Ankh, and surnamed 'the great god.' . . . A serpent to which the Egyptian texts give the epithet of 'the Magnificent,' 'the Splendid,' was regarded as the living symbol of the god of Piton. It bore the name of Kereh; that is, 'the Smooth.' And this serpent again transports us into the camp of the Children of Israel in the Wilderness; it recalls to us the brazen

[1] Uarda, vol. ii, p. 38.

[2] One of the Pharaoh's "treasure cities, Pithom and Raamses." Exodus, i, 11.

[3] On the Egyptian obelisk, originally from On (Heliopolis), the great seat of learning, now in the city of New York, in whose shadow, doubtless, Joseph at times made love to the high-priest's daughter, and Moses learned the meaning of hieroglyphics, occurs the phrase, "Tum, lord of the city of On;" and, what is of more interest in this connection, one which reads, "The god Tum, who gives life." I may add a stanza from a hymn addressed to Tum:—

"Come to me, O thou sun;
Horus of the horizon, give me help.
Thou art he that giveth help;
There is no help without thee."

—Records of the Past, vol. vi, p. 100.

serpent of Moses, to which the Hebrews offered the perfumes of incense, until the time when King Hezekiah[1] decreed the abolition of this ancient serpent-worship."[2] He further says: "I will not venture to decide the question whether the god, 'He who lives,' of the Egyptian text is identical with the Jehovah of the Hebrews, but, at all events, everything tends to this belief when we remember that the name of Jehovah[3] contains the same meaning as the Egyptian word Ankh, 'He who lives.'"[4] These are highly interesting statements of this learned Egyptologist.

Bearing in mind what has just been said, it is interesting to turn to what Solomon (?) says about the "brazen serpent," and the cures wrought by it. In the "Book of Wisdom," it is spoken of as a symbol, "a sign of salvation;"[5] and, it is said: "For it was neither herb nor molifying plaster that healed them, but thy word, O Lord, which healeth all things."[6] And to this it is added: "For it was thou, O Lord, that hath power of life and death and leadest down to the gates of death and bringest back again."[7]

[1] See 2 Kings, xviii, 5.

[2] Egypt Under the Pharaohs, vol. ii, p. 376. Second edition. London, 1881.

[3] It is well known that this is not the correct form of the name. It was lost at an early day, and is not to be found in the New Testament in any form. It was not to be spoken. Much interest has always been taken in this remarkable word. According to a recently-translated Assyrian inscription, the correct form of the name is Ya-u, or Yâhu. Mr. Hodges dwells on this highly-interesting discovery in his edition of Cory's Ancient Fragments, p. 28.

[4] *Op. cit.*, p. 377.

[5] Book of Wisdom, ii, 6. [6] *Ibid.*, xv, 12.

[7] The power of healing was a prominent and popular characteristic of the god of the Hebrews. "I am the Lord that healeth thee" (Ex., xv, 26); "I will restore health unto thee and I will heal thee of thy wounds, saith the Lord" (Jer., xxx, 17); "He healeth the broken in heart and bindeth up their wounds" (Ps. cxlvii, 3); "Heal me, O Lord, and I shall be healed" (Jer., xvii, 14); and other similar passages are met with in the

Christian writers have generally explained the brazen serpent to be a symbol of God, or the Savior. The writer of the article on medicine, in Smith's "Dictionary of the Bible," says that even in the Talmud it is acknowledged "that the healing power lay not in the brazen serpent itself, but as soon as they feared the Most High and uplifted their hearts to the heavenly father they were healed, and in default of this they were brought to nought.' Thus the brazen serpent was symbolical only." A serpent clinging to a cross was formerly much used as an emblem of Christ. In fact, a sort of Christian serpent-worship was for a long period greatly in vogue among many besides the professed Ophitæ.

In this connection it is well to say, that the *naja haje*, *naia*, or *asp*, the serpent shown in the cut of the brazen serpent, was the species always, or nearly always, taken to represent the spirit pervading nature, the Agathodæmon, or Cnuphis, whom the Egyptians were wont to adore as the creator of the world. It was the Uræus or Basiliskos of the Pharaohs. It is from three to five feet in length. It is extremely venomous. In appearance, it resembles the Indian cobra de capello,[1] but has no spectacle-marking on its head. In hieroglyphics it signifies "goddess."

As to "the serpent of the burning bite which destroyed the Children of Israel," I may say, in the words of an authoritative work, "Either the cerastes or the naja haje or any other venomous species frequenting Arabia may denote it."[2] The *Vipera cerastes* is small, horned, burrows in sand, and is very venomous. Hero-

Bible. Indeed, the curing of diseases has always been largely resorted to when the claim of divinity has been brought forward. It is a deceptive test.

[1] Naia tripudians.

[2] Smith's Dictionary of the Bible.

dotus was led to believe that it was "perfectly harmless,"[1]—a great mistake. It was used to represent the letter f. Says Sir Gardner Wilkinson: "As Herodotus does not notice the asp, it is possible that he may have attributed to the cerastes the honor that really belonged to that sacred snake."[2] This mistake is still frequently made.

But the association of the serpent with Æsculapius, as a remnant of serpent-worship, can be explained without going to the Egyptian Tum, or any other foreign sun-god. One has but to turn to Apollo, to whom, as in the case of, perhaps, all sun-gods, the reptile was sacred.[3]

The question now is, then, what was the reason for the association of the serpent with Apollo? The usual reply is: the destruction by him of the Python, which is essentially the same as the Aub or Ob, or, as it is often given, Typhon, of the Egyptians, an evil monster which was probably taken primarily to represent harm resulting from the periodical overflow of the Nile. Homer says:—

> "With his shining shaft Apollo slew
> That ugly dragon, hideous to the view,
> Which grew, long nourished in its slimy den,
> A monster horrible, the dread of men."[4]

Admitting, however, that Apollo overcame a mythical serpent, like many related divinities, from the Vedic sun-god, Indra, the destroyer of Ahis down, does not

[1] Herodotus, ii, 74.

[2] Note to ii, 74, in George Rawlinson's edition of Herodotus.

[3] The reader may turn with advantage to Dr. J. S. Phené's interesting illustrated essay on "Prehistoric Traditions and Customs in Connection with Sun and Serpent Worship," in the Transactions of the Victoria Institute, vol. viii, p. 321. London, 1875.

[4] Hymn to Apollo. Translation by C. C. Conwell, M.D. Philadelphia, 1830.

afford a satisfactory solution of the matter under discussion. The Agathodæmon is infinitely preferable to Typhon as the prototype of the serpent of Æsculapius. It, indeed, was the reptile sacred to Apollo as well as Tum.

A study of the origin of the association of the good serpent with Apollo and Ra-Tum and other sun-gods is interesting. In the search for it one may get a clue to it in comparative mythology. The close resemblance to one another of Apollo, Ra, Baal-Samen of the Phœnicians, Shamas of the Assyrians, and other sun-gods, would lead one to think that there was an archetypal one; and to find this original one the intelligent mind would naturally look to the East, to the region about the lower waters of the Tigris and Euphrates, and with a reasonable expectation of discovering it there.[1] For among the Turanians, in that locality, the worship of the heavenly bodies undoubtedly first acquired prominence; and in the same locality, too, among the same people, the worship of serpents, according to Bryant,[2] who has written learnedly on the subject, began, and, as Fergusson says, not only originated but "spread thence, as from a centre, to every country or land of the old world in which a Turanian people settled,"[3] becoming adopted to some extent also by Semites and Aryans. From Hea, one of the three great gods (Ana, Hea, and Bel) of the Accadio-Sumerians, and, later, of the people of Babylonia, doubtless sprang some features of the Apollo myth, and possibly in part through Horus of the Egyptians. To Baal-Samen, the baal of the heavens,

[1] No doubt the great home of the Indo-Europeans furnishes a closely corresponding myth. But there is good reason to hold that the main features of the great astronomical myths antedated the Vedas. Grecian mythology was largely derived from Egypt and Phœnicia.

[2] Mythology, vol. ii, p. 197. [3] Tree and Serpent Worship, p. 3.

of the Phœnicians, Apollo had many points of resemblance. It has been maintained, however, that Apollo was "a pure growth of the Greek mind."[1] He was so in part.

Speaking of Hea, Lenormant says that it was he "that animated matter and rendered it fertile, that penetrated the universe and directed and inspired it with life."[2] As water was believed to be the vehicle of all life and the source of generation, he sprung from the ocean and was regarded as amphibious. Oannes[3] was the name by which he was known by the Greeks. Like Dagon, of the Philistines, whose prototype he was, it was usual to give him the combined form of a fish and a man. One of the symbols of him, according to Rawlinson,[4] was a serpent, an illustration of which is reproduced here. He was the god of life, and, significantly enough, the literal meaning of his name is serpent as well as life. Here, then, we have the serpent signifying life. This is a very noteworthy fact. In an interesting paper read in 1872 before the Anthropological Institute of Great Britain, by Mr. C. S. Wake, it is very properly said: "It is probable that the association with the serpent of the idea of healing arose from the still earlier recognition of that animal as a symbol of life."[5]

FIG. 7.—A SYMBOL OF HEA.

It is not amiss to remark, in this connection, that it

[1] Murray's Mythology, p. 117. [2] Chaldean Magic, p. 114.

[3] A graphic account of this mystic creature is given in an extant fragment of Berosus. He introduced all civilizing arts. See Cory's Ancient Fragments, p. 50. Hodges' edition.

[4] Five Great Monarchies, vol. i, p. 122.

[5] "The Origin of Serpent-Worship," in the Journal of the Victoria Institute, vol. ii, p. 373.

is a curious fact that the American Indians associated a serpent with the great sun-god, or, rather, the god of light, Manabozho,[1] a healing divinity, the one that instituted the sacred Medicine-Feast. It is observed by Miss Emerson that "Apollo, as a god of medicine, was originally worshipped under the form of a serpent,[2] and men worshipped him as a helper; and we trace a similar idea among the Indians relative to Manabozho. And a further association of ideas suggests the mystic god, Unk-ta-he, the god of waters, pictured as a serpent, who was believed to have power over diseases."[3] To this I may add that Hea sprang from the Persian Gulf, and was regarded as the god of waters as well as of life.

FIG. 8.—MANABOZHO.

A great deal has been written on serpent-worship, "the first variation," says Bryant, "from the purer Sabaism;"[4] and the number of suggested explanations of the curious cultus is almost legion. I hesitate about touching on the subject; but some statements on it are called for, to render the treatment of the matter on hand reasonably complete.

In a recent able work, Mr. C. F. Keary, of the British Museum, presents some interesting facts and inferences on the origin of the worship. He maintains that the tree, mountain, and river were the three great primitive fetich-gods, and forcibly argues that a serpent was the symbol of the last, which, it may be noted, is nearly

[1] Dr. Brinton gives the name as Michabo. He gives an interesting account of this great Algonkin myth in his American Hero-Myths. Philadelphia, 1882.

[2] Partly true.

[3] Indian Myths, p. 45. Boston, 1884.

[4] Mythology, vol. ii, p. 458.

always a life-giving power, an early and substantial type of the *fontaine de jouvence.* Without pretending to account for their original worship, he "takes it for certain that, at a very early time, rivers became through symbolism confounded with serpents."[1]

Remnants of the three fetich-gods of Mr. Keary are preserved in later and more abstract cults, and may be largely found in Indo-European mythologies. The Greeks and Romans appear to have regarded rivers and mountains with particular favor, while the Celts and Teutons were more especially devoted to trees. The wells of knowledge and of magic and the fountains of youth which are met with in myth and legend are simply the narrowing to particular instances of the magic, the sacredness, and the healing gifts which were once universally attributed to streams. The monstrous python which Apollo encountered and destroyed at Delphi was, according to Mr. Keary, a river, and a harmful one,—the river of death. "The reptile was, we know," says he, "before all things, sacred to Æsculapius, and was kept in his house, as, for example, in the great temple at Epidaurus. It would seem that the sun-god has the special mission of overcoming and absorbing unto himself this form of fetich. This is why Apollo slays the python, and why the snake is sacred to Æsculapius."[2]

Mr. Keary was by no means the first, I may say, to emphasize the association of serpents with rivers. The fact has been dwelt on by Dr. Brinton. Says this distinguished student of American archæology: "The sinuous course of the serpent is like nothing so much as that of a winding river; which, therefore, we often call serpentine. So did the Indians. Kennebec, a stream in

[1] Outlines of Primitive Belief, p. 75. London and New York, 1882.
[2] *Ibid.*, p. 77.

Maine, in the Algonkin, means snake, and Antietam, the creek in Maryland of tragic celebrity, in an Iroquois dialect, has the same significance. How easily could savages, construing the figure literally, make the serpent a river- or water- god."[1]

I believe, however, that it would be a mistake to hold that the serpent was at any time exclusively a symbol of the river. Both Mr. Keary and Dr. Brinton say as much. In the old world, as well as in the new, it was widely recognized as a symbol of lightning, and believed to have power over wind and rain.

Some have turned to the heavens for an explanation of serpent-worship. Thus, Mr. Arthur Lillie, in an interesting little work, says: "Like all old religious ideas, the serpent-symbol was, probably, in the first instance, astronomical.[2] Two thousand eight hundred and thirty-six years before Christ, a large star was within one degree of the celestial pole. This was the *A* of Draco."[3] Much interest was taken in this star of Draco, formerly, as Mr. Proctor says, "the polar constellation"[4] in different countries,[5] as, for instance, in Egypt. In their studies of the great pyramid Jizeh, both Proctor and Piazzi Smyth[6] dwell on the subject at length.[7] The passage from the north, which slants downward at an angle of

[1] Myths of the New World, p. 107.

[2] It is interesting to observe that, according to Miss Emerson, "it is probable that the Indian derived the sacred symbols of his worship from the configuration of the constellations." Indian Myths, p. 316.

[3] Buddha and Early Buddhism, p. 7. London, 1881.

[4] The Great Pyramid, p. 100. London, 1883.

[5] In an article on the "Astronomy and Astrology of the Babylonians," Mr. Sayce says: "Next to the planets in importance was the polar star, called Tir-anna, or Gagan-same, or 'Judge of the Heaven,' to which a special treatise was devoted in Sargon's Library." See Transactions of the Society of Biblical Archæology, vol. iii, p. 206.

[6] Our Inheritance in the Great Pyramid.

[7] The constellation of Draco lies near to and to the north of "the Dipper," or Great Bear, and is easily distinguished.

26° 17′ into the immense structure, would seem to have been constructed so that *A* of Draco shone down it. When this was the case, the star was 3° 42′ from the pole, which was its position both about 2170 and 3350 B.C. "We conclude," says Proctor, "with considerable confidence, that it was about one of the two dates, 3350 and 2170 B.C., that the erection of the great pyramid began, and from the researches of Egyptologists it has become all but certain that the earlier of these dates is very near the correct epoch."[1] Smyth takes 2170 B.C. as the correct date, but his unscientific method of study renders him an unreliable authority. The question is highly interesting and important.

However, the constellation of Draco was represented in ancient astronomy by a tortuous serpent, either alone or in connection with a tree. Those familiar with the description of the shield of Hercules,[2] attributed to Hesiod, and which, it is believed, was suggested by a Zodiac temple[3] of the Chaldeans, imitations of which were to be found in Egypt and elsewhere, will recall the reference to Draco,[4] as follows:—

> "The scaly terror of a dragon coil'd
> Full in the central field; unspeakable;
> With eyes oblique, retorted, that aslant
> Shot gleaming flame; his hollow jaw was fill'd
> Dispersedly with jagged fangs of white,
> Grim, unapproachable."[5]

It is hardly to be inferred from this description, I

[1] *Op. cit.*, p. 101.

[2] Homer's description of the shield of Achilles is shorter, and was probably suggested by the same thing. Iliad, xviii.

[3] See pictures of such in Astronomical Myths, by Blake, London, 1877. Also, in Rawlinson's Five Great Monarchies.

[4] It is believed that it is referred to in Job, in the verse reading, "His spirit hath adorned the heavens and his obstetric hand brought forth the winding serpent" (xxvi, 13, Douai version). The authorized is not literal.

[5] The Shield of Hercules. Translation by Elton.

may remark, that the worship of Draco would be one of love. Yet, Rawlinson says: "The stellar name of Hea was Kimmut; and it is suspected that in this aspect he was identified with the constellation Draco, which is perhaps the Kimmah [1] of Scripture."[2] This is an interesting statement when taken in connection with what has been already said about Hea. To the Accadians and others the north was a favorable point, being the source of cool, vivifying breezes.

But, whether from fear or not, Draco inspired widespread attention and worship. Lillie remarks that the serpent of the "three precious gems" of the Buddhist, the serpent, sun, and tree, the A. U. M., is Draco at the pole. The Tria Ratna, or three precious symbols of the faith, have, in the representation given, their earliest emblem, except, perhaps, the swastika,[3] or cross, which was doubtless formed at one time of two serpents.[4]

FIG. 9.—THE BUDDHIST TRIA RATNA.

In the illustration, the serpent represents the male and the staff the female or negative principle. It has been asserted that we have in it the prototype of the caduceus of Hermes.

The assumption of the serpent as a totem,[5] or symbol, of a family or tribe has been held—as, for example,

[1] Translated Pleiades. Job, ix, 9; xxxviii, 31; and Amos, v, 8.

[2] Five Great Monarchies, vol. i, p. 122. See also his edition of Herodotus, vol. i, p. 600.

[3] Those interested in this symbol should consult Schliemann's Troy and its Remains.

[4] The swastika was so formed by Indians. See illustration in Emerson's Indian Myths, p. 10.

[5] Totem is an Algonkin word, signifying to have or possess. It represented, among the Indians, the social unit or clan, the gens of the Romans.

by Mr. McLennan [1] and Sir John Lubbock[2]—to afford an explanation of the origin and practice of serpent-worship. This honor was no doubt accorded the reptile at a very early period and in different parts of the world; and it is still done by the Nagas of India and others. In speaking of Parium, a city of the Troad, Strabo says: "It is here the story is related that the Ophiogeneis have some affinity with the serpent tribe. . . . According to fable the founder of the race of Ophiogeneis, a hero, was transformed from a serpent into a man. He was, perhaps, one of the African Psylli." The power of curing by touch persons bitten by serpents[3] was claimed by this tribe. David would seem to have belonged to the serpent family, as appears from the name of his ancestor, Naasson; and it has been suggested that the brazen serpent found by Hezekiah, in the Temple of Solomon, was a symbol of it. The friendliness of David to the king of Ammon is thus explained.[4] Speaking of rattlesnakes, it is said, in Miss Emerson's work, "These creatures were so highly esteemed that to have a serpent as his totem elevated an Indian chief above his brothers."[5]

The fact of the same word meaning both serpent and life has been believed to cast light on the origin of the worship of serpents. After stating that the reptile was always a symbol of life and health in Egypt and other countries, the Abbé Pluche gives as the reason, "because among most of the Eastern nations, as the Phœnicians, Hebrews, Arabians, and others, with the language of which that of Egypt had an affinity, the word *heve* or *hava* equally signifies the life and the serpent. The

[1] Fortnightly Review, vol. vi and vii. N. S.
[2] The Origin of Civilization and the Primitive Condition of Man, 1870.
[3] Strabo, xiii, 1. [4] 1 Chronicles, xix, 2. [5] Indian Myths, p. 44.

name of *Him who is*, the great name of God, *Jov* or *Jehova*, thence draws its etymology. *Heve*, or the name of the common mother of mankind, comes likewise from the same word. Life could not be painted, but it might be marked out by the figure of the animal which bears its name."[1] According to Lenormant,[2] one of the generic names in the Assyrian-Semitic tongue is *havon*, like the Arabian *hiyah*, both derived from the root *hâvah*, to live. From the same root came the Latin *ave*, a wish of good health, and also *ævum*, the life. The asp still bears the name of *naja haje*.

It is interesting to observe that the American Indians, as well as Eastern peoples, made use of the serpent as a symbol of life. The belief that the animal had power over the fertilizing summer showers was probably at the bottom of it, as well as its title to god of fruitfulness. Says Dr. Brinton: "Because the rattlesnake, the lightning symbol, is thus connected with the food of man, and itself seems never to die, but annually to renew its youth, the Algonkins called it 'grandfather,' and king of snakes. They feared to injure it. They believed it could grant prosperous breezes or raise disastrous tempests. Crowned with the lunar crescent, it was the constant symbol of life in their picture-writing."[3] In the language of the Algonkins and of the Dakotas, the words *manito* and *waken*, which express divinity in its widest sense, also signify serpent.

Mr. Wake entertains the opinion that the mainspring of serpent-worship was a belief that the animal was really the embodiment of a deceased human being; or,

[1] The History of the Heavens. Translated from the French by J. B. de Freval. Two volumes. London, 1741, vol. i, p. 42. The first volume is a very able and interesting mythological production.

[2] Beginnings of History, p. 114.

[3] Myths of the New World, p. 120.

in other words, that the worship was ancestral in character. He says: "The serpent has been viewed with awe or veneration from primeval times and almost universally as a re-embodiment of a deceased human being; and as such there were ascribed to it the attributes of life and wisdom and the power of healing."[1]

But little, however, in what has been said throws much light on the main point at issue, namely, why the serpent should be yielded worship. The cause must be sought for, to some extent, in peculiarities of the animal itself. And it has peculiarities enough. Remarkable in form and in mode of locomotion, and in some species possessed of deadly venom, one might well regard it with admiration and awe. Then, its longevity and apparent power of renewing its age serve to make it a very extraordinary creature. The opinion has been expressed[2] that its power to glide along without limbs, like the heavenly bodies, was the reason why it was held to be sacred. No doubt its remarkable power of motion in the absence of limbs forcibly impressed the ancients.[3] Solomon himself said that one of the four things he could not understand was "the way of a serpent upon a rock."[4]

Herbert Spencer maintains that the first step toward the worship of serpents and other animals was the

[1] "The Origin of Serpent Worship," in the Journal of the Anthropological Institute, vol. ii, p. 373.

[2] By Plutarch, in Isis and Osiris.

[3] In an extant fragment from Sanchoniathon, after the statement that "Taautus first consecrated the basilisk and introduced the worship of the serpent tribe, in which he was followed by the Phœnicians and Egyptians," it is said of the animal that it is "the most inspired of all the reptiles and of a fiery nature, inasmuch as it exhibits an incredible celerity, moving by its spirit without either hands or feet or any of those external organs by which other animals effect their motion." See Cory's Ancient Fragments, p. 22. Edition by Hodges.

[4] Proverbs, xxx, 19.

naming or, rather, nicknaming of men after creatures to which they bore some points of resemblance. Thus, from having apparently, like Holmes's Elsie Venner, some of the qualities of a snake, one might be compared with the animal, and so named after it. Then the descendants, out of regard for their ancestor,[1] might take the name, or, in other words, accept the snake as their totem.

Although the Æsculapian serpent was innocent, it was mostly a harmful species which received worship. The asp of the Egyptians and the cobra of the East Indians are decidedly venomous. Under the name of *uræus* the asp was a symbol of royalty in ancient Egypt. Ebers makes Rameses say: "My predecessors chose the poisonous *uræus* as the emblem of their authority, for we can cause death as quickly and as certainly as the venomous snake."[2] The American Indians were devoted to the rattlesnake, which is extremely venomous. Thus, says Dr. Brinton: "The rattlesnake was the species almost exclusively honored by the red race. It is slow to attack, but venomous in the extreme, and possesses the power of the basilisk to attract within its spring small birds and squirrels."[3] Evidently the worship of such reptiles must have been inspired, in a measure at least, by fear. Still, it appears certain, as the author just quoted believes, that, as employed to express the divine element in atmospheric and other natural phenomena, it far more frequently typified what was favorable and agreeable than the reverse. Ebers gives it as his opinion that "mythological figures of

[1] Mr. Spencer says: "The rudimentary form of all religion is the propitiation of dead ancestors, who are supposed to be still existing and to be capable of working good or evil to their descendants." "Origin of Animal Worship, etc.," in Fortnightly Review, vol. vii, p. 536. N. S.

[2] Uarda, vol. ii, p. 249. [3] Myths of the New World, p. 108.

snakes have quite as often a benevolent as a malevolent signification."[1]

A word must be said about the phallic explanation of the origin of serpent-worship. Mr. Cox, an excellent writer on mythology, is friendly to this theory. After speaking of the phallus as a symbol, he says: "When we add that from its physical characteristics the Asherah, which the Greeks called the phallus, suggested the emblem of the serpent, we have the key to the tree- and serpent- worship."[2] Beyond question, a phallus-serpent comes frequently into view in studying mythology, but it would be very hard to prove that every serpent met with had its prototype in the phallus. It is to be regarded as beneficent, a life-giving power. The Agathodæmon is frequently so represented.

Probably the possibility of charming serpents has had something to do with the remarkable uses to which these animals have been put. A person who could handle without danger a venomous reptile, and control its actions at pleasure, might easily lead many to believe him to be possessed of some miraculous power. Aaron resorted to this artifice when he appeared before Pharaoh with his cataleptic serpent, in the form of a rod.[3]

The reason just given seems better than the one Plutarch gives for the association of the serpent with certain great men, when he says, in his "Life of Cleomanes," that it was from a belief that after death evaporation of "the marrow"[4] produces serpents;[5] that

[1] *Op. cit.*, vol. ii, p. 88.

[2] Comparative Mythology and Folk-lore, p. 143. London, 1881.

[3] See Exodus, vii, 10-13.

[4] The spinal marrow was believed by some in ancient times to be the seat of life. Plato entertained that view. See Timæus, 74, 91.

[5] In that hoary Egyptian work, The Book of the Dead (ch. 155), occurs this remarkable passage: "All creation is, when dead, turned into living reptiles."

the ancients appropriated the serpent, rather than any other animal, to heroes.

I believe it is vain to attempt to trace the origin of serpent-worship to one and the same source. This appears plain when it is remembered that some serpents represented good, while others stood for the opposite, evil. The Bible furnishes a marked instance of contrasts: in one place a serpent was used, as has been pointed out, as a symbol of God, or Christ, while elsewhere one represents cunning, envy, lying, and even "the devil and Satan, which deceiveth the whole world."[1] In the nature of things, one would expect the same species of reptile to produce a very similar impression on primitive peoples everywhere. This, probably, accounts largely for the resemblance to one another of most serpent-legends. The different impressions produced by different species would, to some extent, explain the unlike significance of serpent-symbols among different peoples. The signification, however, was often of very fanciful origin, as, for example, where a serpent in the form of a circle symbolized eternity, or, rather, endless life.

[1] Rev., xvi, 9.

CHAPTER X.

VARIOUS ATTRIBUTES OF ÆSCULAPIUS.

In this chapter I will speak briefly of various attributes, more or less generally accorded to Æsculapius. Some of them are decidedly significant, but none so much so as the staff and serpent of which I have fully treated.

In many, indeed most, of the representations of Æsculapius, he is crowned with A WREATH OF LAUREL. This mark of merit, like rays of light which were given in some instances, has been commonly held to have been accorded him because he was the son of Apollo, to whom the tree was sacred. According to this view, one has in it a remnant of the oracular laurel at Delphi. Another way of accounting for it is, to use the words of Tooke, "because that tree is powerful in curing many diseases,"[1] an exaggerated claim. The ancients regarded it as effective against evil spirits.[2]

A BUNCH OF HERBS was at times represented in one of the hands of the god. This was very appropriate. The district of Greece[3] in which, according to the legend, he studied under Chiron, was famous for its medicinal plants.

A BOWL was occasionally shown in connection with figures of Æsculapius. It was indicative of the administration by him of medicinal potions.

A SCROLL was an attribute of some Æsculapian

[1] Pantheon, p. 271. Am. edition. Baltimore, 1830.

[2] For much of interest about the laurel, see Plant-lore Legends and Lyrics, p. 404, by Richard Folkard, Jr. London, 1884.

[3] Thessaly.

figures. It is an admirable one for an ideal physician. In modern times it should certainly be regarded as an indispensable one. Medicine has been evolved from recorded experience, and its progress is dependent on the same.

An unpublished discovery of any kind is, in a manner, none at all. Curiously enough the name of the Egyptian god of medicine, Imhotep, means, "I bring the offering," the ideograph for *hotep*, or offering, being a papyrus roll.

I will now say a few words about a remarkable attribute of some representations of the god of medicine. I refer to TELESPHORUS, EUEMERION, or ACESIUS,[1] a small figure, a boy, but not a son, as is sometimes stated. As will be seen in the cut of him given, and which is copied from one given by Tooke,[2] as seen in a statue in the Louvre, he is wrapped in a mantle and is barefooted. Figures of him, however, vary considerably in appearance. In him we have, according to some, a sort of dæmon or familiar spirit, such as that which Socrates is said to have had. It is better, I think, to regard him as a genius,[3] meant to symbolize the hidden sustaining vital force, the *vis medicatrix naturæ*, or *anima medica*, upon which greatly depends the recovery of the sick. It has been suggested that the careful

FIG. 10.—TELESPHORUS.

[1] The literal meaning of Telesphorus is "bringing to an end;" of Euemerion, "prosperous, or glorious;" and of Acesius, "health-giving."

[2] Pantheon.

[3] Tooke states that by *genius* is generally meant "that spirit of nature which produces all things, from which generative power it has its name. . . . The images of the genii resembled, for the most part, the form of a serpent. Sometimes they were described like a boy, a girl, or an old man." Pantheon, p. 240.

wrapping may be intended to indicate the need of such protection during convalescence.

The DOG was prominent in connection with the Epidaurian and other statues of Æsculapius. The fidelity and watchfulness of this friendly animal render it a very fit attribute of the god. The part played with the goat, according to the legend, has been taken by some to afford an explanation of the connection. Another is furnished by the name, which, as will be pointed out in the next chapter, apparently means man-dog.

The Parsis believed that dogs with four eyes could drive away the death-fiend; but such not being procurable, one "with two spots above the eyes" was used for the purpose. In their great sacred book,[1] the animal is represented to be the special one of Ormazd. Herodotus states that the Magi do not hesitate to kill all animals, "excepting dogs and men."[2]

The Oriental Mardux, in whom was assimilated the more ancient Silik-mulu-khi, a healing divinity, was attended by dogs, as was Nimrod, the hunter, with whom he may have been identical.[3]

The COCK, as well as the dog, was a prominent attribute in many representations of Æsculapius. This alert bird, a bird watchful of the returning light, was very properly associated with a sun-god. It was a common object of sacrifice to the god, by patients who were grateful for relief or cure. Socrates has, through Plato, made this memorable. Said the dying sage, as he felt his limbs growing cold: "When the poison reaches the heart, that will be the end." Feeling his body gradually losing its vital heat, and realizing that relief from his troubles was at hand, he said, as he passed away, "Crito, I

[1] Zend Avesta. [2] Herodotus, i, 140.

[3] See Transactions of the Society of Biblical Archæology, vol. ii, p. 245.

owe a cock to Æsculapius; will you remember to pay the debt?" "The debt shall be paid," responded his friend.[1]

The practice of sacrificing[2] a cock for the restoration of health was not exclusively practiced by the votaries of Æsculapius. In his "Life of Pyrrhus, King of Epirus," Plutarch says that "a white cock" was sacrificed generally by each of the patients he touched "for swelling of the spleen." The full quotation will be given in a succeeding chapter. The bird is still sacrificed in some parts of Scotland and other countries, for the removal of at least one disease,—epilepsy. Dr. Mitchell, of Edinburgh, states that the practice is very familiar to him. In the northern part of his native country, "on the spot," says he, "where the epileptic first falls, a black cock is buried alive, along with a lock of the patient's hair and some parings of his nails."[3]

There is yet another animal associated with the god of medicine,—the GOAT. It was especially by the Cyrenians that the connection was much emphasized. Pausanias remarks that "the Cyrenians sacrifice goats, although this rite was not delivered by the Epidaurians."[4] Still, as already pointed out, on Epidaurian coins, Æsculapius was represented sucking a goat,—an illustration of the legend.

Why the goat was connected in sacrifice with the god is explained by Tooke thus: "A goat is always in a fever, and, therefore, a goat's constitution is very contrary to health."[5] Shakespeare, in "King Lear," uses

[1] Phædo.

[2] Grimm justly remarks that sacrifice was a common feature of heathen medicine; "great cures and the averting of pestilence," says he, "could only be effected by sacrifice." Teutonic Mythology (translation), p. 1150.

[3] Past in the Present, p. 164. New York, 1881.

[4] ry of Greece (translation), vol. ii, p. 211.

[5] n, p. 271.

the phrase "goatish disposition" in reference to a "whoremaster man." The fabled satyrs were in part goats in form. I am not aware that there was anything of the Biblical scape-goat principle[1] about the sacrifice, a superstition similar to the one which prevailed "all over Egypt," as we are told by Herodotus,[2] of praying that evils impending over the people might fall on the head of the sacrificial victim, and then casting it into the Nile, if there was no Greek at hand to whom it could be sold.

The great prominence of the goat in the Æsculapian rites in Cyrene may have been due, to some extent at least, to the proximity of Egypt, a country in which the animal played a prominent part. In the goat of Mendes,[3] the incarnation of Khem or Min, was personified, says Lenormant, "in the most brutish manner the reproductive power." [4] Both the goat and the cock were often associated with the Egyptian Hermes.

I may add that the cause of the association of the goat with Æsculapius has been referred to the name. The Abbé Banier states the case thus: "*Es* or *ex*, which begins the name of the god, signifies a goat in the language of the Phœnicians,[5] and, with a little variation, the same thing in Greek;[6] and this had given rise to the fable of Æsculapius being nursed by that animal."[7]

[1] See Levit., xvi *et seq.* [2] Ch. ii, 39.

[3] Ammon, Knuphis, or Agathodæmon of later times.

[4] Ancient History of the East, vol. i, p. 326.

[5] The language of the Hebrews is essentially the same: *es* or *ez* means a goat.

[6] αἴξ

[7] The Mythology and Fables of the Ancients Explained from History, vol. iii, p. 160. London, 1740.

CHAPTER XI.

GODS ANALOGOUS TO ÆSCULAPIUS.

THE great eminence acquired by the Æsculapian myth among the Grecians might reasonably lead to the belief that it was one entirely special to that imaginative people. Like many other gods, however, of both high and low degree, this one was only in part "to the manor born." There is good ground for believing that there was what might justly be called a prototype of the divinity of much repute in both Phœnicia and Egypt. Dr. Mayo does not hesitate to say that "Æsculapius was actually known in the Oriental countries before he was in Greece, whither his worship was brought from Phœnicia by the colony of Cadmus and from Egypt by that of Danaus."[1] It is not improbable that the main conception of the healing god did really long antedate not only the Grecian but both the Phœnician and Egyptian embodiments of it. Evidence of this will be found later in the chapter.

The ESMUN "the Eighth" of the Phœnicians, especially worshipped at Berytus,[2] has been regarded[3] as essentially the same as the Grecian Æsculapius. He was probably that and something more. Little definite is known of this personage, of whom the serpent was a symbol, save what we are told of him in the fragment of an historical work by Sanchoniathon, preserved by Eusebius, an early Christian writer. "To Sydyk, called

[1] New System of Mythology, vol. iii, p. 456. Philadelphia, 1819.

[2] Now called Beyrout.

[3] Damascius, in his Life of Isidorus, uses the phrase "Esmun, who is interpreted Asclepius."

the Just," it is said, "one of the Titanides[1] bore Esmun."[2] He is represented to have been the eighth and chief of those spared by the deluge, and also of the Cabiri, or Cabeiri,[3] "the seven sons of Sydyk,"[4] the mighty ones, named, it has been said,[5] after mountains in Phrygia, and divinities widely, but in general secretly, adored, in Phœnicia, Carthage,[6] Egypt,[7] and elsewhere.

The belief has been expressed that Noah and his family and the Cabiri were originally the same.[8] Mr. Faber entertained this view, and it is fully set forth by him in an interesting work,—one, by the way, in which is ably presented the so-called Arkite symbolism,[9] which has excited considerable attention, but which Mr. Tylor, as well as many others, declares to be "arrant nonsense."[10] In reference to Æsculapius he says: "This deity connects the first and second tables of the Phœnician genealogies, his father, Sydyk, occupying a conspicuous place in the one, while his mother, Titanis,

[1] Daughters of Titan, by Astarte.

[2] See Cory's Ancient Fragments, p. 14. Edition by Hodges.

[3] From the Semitic word *Kabir*, great.

[4] Cory's Ancient Fragments, p. 19. [5] Chambers's Encyclopædia.

[6] The temple of the god at Carthage was of great splendor and renown. See Dr. Davis's Carthage and its Remains, ch. xvii. London, 1861. Says the Doctor: "The Temple of Æsculapius was as prominent a feature of Carthage as the Capitoline hill was at Rome, or as St. Paul's is in London" (p. 369). It was on a rocky eminence (the Byrsa). Ruins of the staircase still remain.

[7] The city of Hermopolis received also the name of Esmun. In the Book of the Dead (ch. cxiv) the deceased is represented as saying, while adoring Thoth, Amset, and Tum: "I have come as a prevailer, through knowing the spirits of Esmun." Thoth presided over this nome.

[8] Bunsen maintains that the Cabiri were the seven archangels of the Jews, originally "the seven fundamental powers of the visible creation." Egypt's Place in Universal History, vol. iv, p. 256.

[9] See Prof. Lesley's interesting work, Man's Origin and Destiny, first edition. Philadelphia, 1868. For some reason the chapter on Arkite symbolism is not given in the second edition.

[10] Primitive Culture, vol. i, p. 218. London, 1871.

is enumerated among the daughters of Cronus, in the other. I am much inclined to think that the imaginary god of health is in reality the very same person as his reputed father, Sydyk, both of them being equally the patriarch, Noah, worshipped in connection with the sun. Macrobius, accordingly, informs us that Æsculapius was one of the many names of the solar deity, and that he was usually adored along with Salus, or the Moon.[1] Salus, however, was no less a personification of the ark than of the moon, those two objects of idolatrous veneration being allied to each other in consequence of the union of the Arkite and Sabian superstitions. Thus, while Noah was revered as the god of health and as one of the eight Cabiri, the vessel in which he was preserved was honored with the title of Salus, or Safety."[2]

Lenormant regards the Cabiri as the seven planets of the ancients; that is, the Sun, Moon, Jupiter, Saturn, Mars, Venus, and Mercury. "Esmun," says he, "invisible to mortal eyes, was supposed to be the connecting link of the seven others and the one approaching nearest to the primordial Baal.[3] He presided over the whole sideral system, and was supposed to preside over the laws and harmonies of the universe, and in this respect was the same as Taaut."[4]

Although secret, the worship of the Cabiri was participated in by persons of either sex and of all ages. In Lemnos and other places the fires were put out, sacrifices to the dead were made, and fire was brought from Delos in a sacred vessel and given to the people, who, with it, began a new and regenerated existence.

[1] Saturnal, i, 20.

[2] The Mysteries of the Cabiri, vol. i, p. 98. Oxford, 1803.

[3] In Phœnicia he was the seven viewed collectively as "the soul of the world." Bunsen's Egypt's Place, etc., vol. iv, p. 229.

[4] Ancient History of the East, vol. ii, p. 221.

Phallic rites formed an inseparable part of the worship, which was indulged in at stated periods.

As showing that Æsculapius was of Phœnician origin, Mr. Faber lays emphasis on the fact that in the edition of Virgil by Servius the line telling of the destruction of the god makes him a Phœnician:—

"*Fulmine Pœnigenam Stygias detrusit ad undas.*"[1]

The usual and, doubtless, the right reading makes *Pœnigenam*, *Phœbigenam*.

The opinion that Æsculapius was essentially the same as ANUBIS among the early Egyptians has been advanced. Both were viewed as simply divine personifications of Sirius, or Sothis, the dog-star.[2] This view is well presented by M. Pluche.

A study of the name[3] Æsculapius may or may not afford evidence in favor of the idea that there was originally a connection between the god and the dog-star. Although decidedly a Grecian god, Asklepios does not appear to be a Greek word. Keightly goes so far as to say, "Of his name no satisfactory derivation has as yet been offered."[4] He ventures, however, to suggest that it may be from the root σκάλλω, the original meaning of which may have been to cut, whence the Latin *scalpo* and our own word *scalpel*. Mr. Keightly forgot that the name was not necessarily Greek; for that, like nearly all others, was largely a derivative language. In the Greek as well as the Latin form, it may be Hebrew, or, what was essentially the same, Phœnician. Taking it to be compounded of *esh*, *aish*, *isch*,

[1] Æneid, vii, line 778.

[2] Tiele takes such a view of Anubis. See History of the Egyptian Religion, p. 65.

[3] Nearly all ancient Hebrew, as well as Assyrian, proper names are expressive of something about the birth or life of the bearers.

[4] Mythology of Ancient Greece and Rome. Third edition. London, 1854.

or *ish*,[1] a man, and *caleb*,[2] *caleph*, or *culap*, a dog, the literal meaning of it is *vir-canis*, or man-dog. But, as some remarks already made indicate, it may be interpreted to mean *goat-dog*.[3]

ANUBIS, ANUP, or ANUPU, who in very early times was possibly the same as Thoth, was regarded as symbolic of that brightest of the fixed stars, Sirius, "the burning," whose first appearance in the morning was the signal of the advent of the warm season, and the Etesian or periodic wind from the north, as well as the beginning of the year.[4] The rising of this notable star heliacally—that is, with the sun[5]—told the Egyptians to prepare at once for the overflow of the waters of the Nile. By many it was believed to be the cause of the flood. The watch-dog was evidently a very appropriate symbol for this star of warning. Then, from the fact that Sirius gave warning of danger, and thus saved the lives of the people, to the symbols of it the serpent, the life-symbol, was often and very properly attached. "On this account it was," says Pluche, "that Anubis and Æsculapius passed for the inventors of physic and the preservers of life."[6]

[1] The Hebrew word, like the Latin *vir*, means man in a distinguished sense (virile), and may come from the Egyptian *ash*, tree of life.

[2] Caleb, or city of the dog, on the coast of Phœnicia, has been accorded the credit of the name of the god. See the Abbé Banier's Mythology and Fables of the Ancients, etc. (translation), vol. iii, p. 160.

[3] Possibly the first syllable of Æsculapius, like the Hebrew *ishi*, salutary, and *asa*, to heal, may have been from the Egyptian *usha*, health-bringing,—doctor. See Gerald Massey's Book of Beginnings, vol. ii, p. 301. London, 1881.

[4] Hence the name, Canicular Year.

[5] It does not now rise heliacally until the middle of August. But, 4000 years ago it rose so about the 20th of June, and just preceded the annual rising of the Nile.

[6] History of the Heavens, vol. i, p. 185. Anubis had various functions which cannot be spoken of here. He bore the souls of men to the nether world, like Hermes, of the Greeks, and assisted Horus in weighing them. A passage in the Book of the Dead reads, "He is behind the bier which holds the bowels of Osiris." Evidently he might be regarded as the god of undertakers.

Others besides the Egyptians regarded Sirius with favor;[1] as, for example, the Parsis, to whom it was "Tystria, the bright and glorious star."[2] In Greece, however, it was not regarded as propitious. To it were attributed certain diseases. Thus, Homer, who calls it Orion's dog, says:—

"His burning breath
Taints the red air with fevers, plagues, and death."[3]

Remembering the medical history of Sirius, it is worth while recalling that the "dog-days," those extending from about the 22d of July to the 23d of August, are often spoken of as the physician's holiday.

One very often hears that THOTH was to the Egyptians the god of medicine, just as Æsculapius was to the Greeks and Romans. Even the late Dr. Aitken Meigs, a scholarly physician, accepted this idea. In an address, to be referred to later, he says: "Æsculapius is, doubtless, the Egyptian Thoth, or Hermes Trismegistus, whose symbols, the staff and twining serpent, surmounted with the mystic hawk of Horus-Ra and the solar uræus,[4] appear in the ancient temple Pselcis, near Dakkeh, in Nubia." The Doctor is about as wide of the mark as Forbes Winslow, when he says that the Grecian "Apollo and Minerva answered

FIG. 11.—ANUBIS.

[1] Typhon, or Set, was regarded, indeed, by the Egyptians as the god Sothis, or Sirius. See Bunsen's Egypt's Place, etc., vol. i, p. 429. But Typhon was not, in early times, regarded as simply the personification of evil. See Kenrick's Ancient Egypt, vol. i, p. 350.

[2] Zend Avesta. Edition by James Darmesteter, in two parts, or volumes, in The Sacred Books of the East, edited by Max Müller, vol. i, p. 88. Oxford, England, 1883.

[3] Iliad, xxii.

[4] Such a staff is, indeed, shown by Wilkinson, and is given by Cooper in his essay, already quoted. From the presence of the hawk and uræus, one might more properly accord it to Horus.

to the Isis and Osiris of the Egyptians; and Orpheus, the priest, poet, and physician, usurped the place of Thoth."[1]

HERMES, THOTH, or THOT, the TET or TAAUTES of the Phœnicians, was not the god of medicine among the Egyptians, any more than he was the god of any other special branch of knowledge. He was the patron god of all kinds of learning.

Says Ebers: "The discovery of nearly every science is attributed to the ibis-headed god, Thoth, the writer or clerk of heaven, whom the Greeks compared to their god, Hermes."[2]

It is no doubt true, however, that Hermes was credited with taking considerable interest in medical matters. He was said to have been the author of six books on the healing art, in which anatomy, pathology, and therapeutics were treated of, together with diseases of the eye,—a part of the body which has always suffered much in Egypt. Ebers remarks that "the book on the use of medicine has been preserved to the present day in the 'Papyrus-Ebers.'"[3]

Having referred to the "Papyrus-Ebers," it may be well to say a few words about it. It was discovered a few years ago by the learned and versatile Egyptologist, Herr Ebers, and is the best preserved of all the ancient Egyptian manuscripts extant. It was written at Sais during the eighteenth dynasty; that is, in the sixteenth century before our era. It consists of 110 pages. In it we have the hermetic medical work of the ancient Egyptians, with the contents of which the Alexandrian Greeks were familiar. The god Thoth is called in it "the Guide" of physicians, and the composition of it is

[1] Physic and Physicians, vol. i, p. 6. London, 1839.
[2] Princess, vol. i, p. 210. [3] *Ibid.*

attributed to him. This venerable document treats of many internal and external diseases of most parts of the body. Special attention is given to the visual organs. Drugs belonging to all the kingdoms of nature are used, and with those prescribed are numbers according to which they are weighed with weights and measured with hollow vessels. Accompanying the prescriptions are noted the pious axioms to be repeated by the physician while compounding and giving them to the patient. The German government has published the work in *fac-simile*, a copy of which I have examined. There is a copy of it, I think, in the Astor Library, New York.

Medicine certainly consisted of more than charms and the like, at a very early period, in Egypt. Indeed, in the remains of Manetho's history of the country, it is said of the successor of Menes, the first king of the first dynasty, which dates back to about 4000 years before our era: "Athothis, his son, reigned 57 years; he built the palaces at Memphis, and left the anatomical books, for he was a physician."[1] The custom of embalming the dead necessarily led to at least a rough knowledge of the anatomy of the body.

SESOSTRIS, or SESORTOSIS, the second king of the third dynasty, sometimes gets credit for being "the actual founder of medicine."[2] Manetho says of him: "He is called Asclepius by the Egyptians, for his medical knowledge."[3]

According to Herodotus and Diodorus, medical practice was carried on in a highly rational way at an early period in Egypt. Mr. Sayce ventures to say that in the period of the eighteenth dynasty medicine was in almost

[1] See Cory's Ancient Fragments, p. 112. Edition by Hodges.
[2] Bunsen, in Egypt's Place in Universal History, vol. ii, p. 89.
[3] See Cory's Ancient Fragments, p. 113.

as advanced a state as in the age of Galen; the various diseases known were carefully distinguished from one another, and their symptoms were minutely described, as well as their treatment. The prescriptions recommended in each case are made out in precisely the same way as the prescriptions of a modern doctor."[1] Mr. Sayce bases these statements on the "Papyrus-Ebers." However, we are informed by Herodotus that specialists were common when he visited the country, which was about 450 years before our era; but this must not be accepted as proof that medicine was necessarily in a very advanced state. Here is what the Grecian historian says: "Medicine is practiced among them on a plan of separation; each physician treats a single disorder, and no more. Thus, the country swarms with medical practitioners, some undertaking to cure diseases of the eye; others, of the head; others, again, of the teeth; others, of the intestines; and some, those which are not local."[2] As to their philosophy of morbid conditions, he says: "They have a persuasion that every disease to which men are liable is occasioned by substances whereon they feed." This doctrine led them "to purge the body by means of emetics and clysters" for "three successive days in each month."[3]

In respect to medical specialism in Egypt, I may further say that, according to Ebers,[4] as early as 1500 before our era, any one requiring a physician sent for him, not to his house, but to the temple. There a statement was obtained from the messenger concerning the complaint from which the sick person was suffering; and then it was left to the principal of the medical staff of the

[1] Ancient Empires of the East, p. 76.
[2] Herodotus, ii, 84. Translation by Rawlinson.
[3] *Ibid.*, ii, 77.
[4] Princess, vol. i, p. 17.

sanctuary to select that master of the healing art whose special knowledge and experience qualified him to be best suited for the treatment of the case. No honorarium was expected from the patient. The fee was paid by the State.

According to Canon Rawlinson, it is an open question whether, as is often said, the physicians of ancient Egypt formed a special division of the sacerdotal order; "though, no doubt, some of the priests were required to study medicine."[1] It is interesting to connect with this the following statement from an authoritative work: "There is no sign in the Homeric poems of the subordination of medicine to religion, which is seen in ancient Egypt and India."[2]

It has been asserted that "medicine in Egypt was a mere art, or profession."[3] That this assertion is ridiculously untrue any one knows who is competent to form an opinion on medical subjects, and who has read the Pentateuch. Moses, whose learning was Egyptian, had a wonderful knowledge of hygiene,—the most important part of medicine. The manner of dealing with contagious diseases described in the thirteenth and fourteenth chapters of Leviticus is far in advance of our practice to-day. So intent were the Egyptians on knowing the nature of diseases that *post-mortem* examinations were, it is said by Pliny, resorted to for the purpose. Unlike the religion of the Hebrews, theirs did not teach them to dread touching the dead. But one has the authority of Celsus for saying that the latter physicians, those of the Alexandrian school, were not satisfied with the dissection of the dead; they went so far as to make *ante-mortem* ex-

[1] History of Ancient Egypt, vol. ii, p. 528. London, 1881.
[2] Encyclopædia Britannica, ninth ed.
[3] Smith's Dictionary of the Bible.

aminations of criminals. In truth, Mr. Sayce properly observes that it was "in medicine that Egypt attained any real scientific eminence."[1]

Jeremiah, speaking of "the daughter of Egypt," says: "In vain shalt thou use many medicines; for thou shalt not be cured."[2] This remark indicates that the skillful use of medicines by the Egyptians was widely noised abroad over five centuries before our era. Both Cyrus and Darius sent to Egypt for physicians.[3] Hippocrates, however, who lived nearly two centuries later than the prophet, gives no prominence to Egyptian medicine. But much earlier, indeed, than this time, it is evident from the works of Homer that it was in repute among the Greeks. Thus, to remove the grief and rage caused by the death of brave Antilochus, we are told that the famous Helen of Sparta, who takes on the occasion the rôle of *une femme médecin*,—

> "Mix'd a mirth-inspiring bowl,
> Temper'd with drugs of sovereign power t' assuage
> The boiling bosom of tumultuous rage.
> * * * * * * * * * *
> These drugs so friendly to the joys of life
> Bright Helen learn'd from Thone's imperial wife,[4]
> Who sway'd the sceptre, where prolific Nile
> With various simples clothes the fatten'd soil."[5]

Again, it is said of the Pharian or Egyptian race:—

> "From Pæon sprung, their patron god imparts
> To all the Pharian race his healing arts."[6]

Such statements as those just made would seem to render it more than probable that not a little of Grecian

[1] Ancient Empires of the East, p. 76.

[2] Jer., xlvi, 11. [3] Herodotus, iii, 1, 129.

[4] Polydamna. Helen's enforced sojourn in Egypt is fully described by Herodotus (ii, 113-116). Thone, Thon, or Thonis, the historian speaks of as the "warden of the Canopic mouth of the Nile." The town of Heracleum bore the name.

[5] Odyssey, iv. [6] *Ibid.*

medicine was of Egyptian origin. Pliny, indeed, says that it was claimed that the study of medicine was begun in Egypt.[1] Blakie, however, ventures to affirm that "the knowledge of medicine came to the Greeks originally from Thessaly, one of the earliest seats of Hellenic civilization, as is evident from the pedigree of Coronis."[2] At any rate, it is certain that, for some time before and after the beginning of the Christian era, Alexandria was a great medical centre. There it was that Herophilus and Erasistratus lived and imperishably distinguished themselves two centuries or so B.C.

But I must return to Hermes, from whom I have been wandering, perhaps, too far and too long. Although I am not disposed to give the medical position to him that some have questionably done, I deem it wise to say a few words especially about him. Lenormant believes that he was originally the angel of Baal, Malâk-Baal, who, like him, assimilated with the Agathodæmon.[3] It is generally believed that he came to Egypt from Phœnicia.[4] He was usually represented[5] with the head of, not a hawk, but an ibis, a heart-shaped bird with the plumage white, except the pinions and tail, which are black, and with long legs and beak, the latter crooked. This bird was the symbol of him made use of in writing. Both it[6] and a species[7] black in color are well described by Herodotus. Mummified specimens of it are to be seen in an excellent state of

[1] Natural History, vii.

[2] Homer and the Iliad, vol. i.

[3] Beginnings of History, p. 536.

[4] Bunsen holds that Esmun and he were originally the same; "as the snake god he must actually be Hermes, in Phœnician, Tet, Taautes." Egypt's Place, etc., vol. iv, p. 256.

[5] In the cut he appears counting the years on a palm-branch—the ideograph for year. (Fig. 12, p. 101.)

[6] Ibis religiosa, Hab of the Ancient Egyptians.

[7] Ibis falcinellus, the glossy ibis.

preservation in museums, as, for instance, in that of the Academy of Natural Sciences of Philadelphia.

I may observe in this connection that an Ibis Society would be the same as a Hermes Society. Neither title is very suitable for a medical one. I have heard of an Ibex Society; but, of course, the ibis and the ibex are entirely different creatures.

HORUS himself, whose "face is in the shape of the divine hawk," [1] and who, in some respects, resembles Apollo, was believed to possess medical power.[2] Murray even says, "Horus was reputed to have been deeply versed in the practice of medicine, and, accordingly, was compared with Æsculapius."[3]

FIG. 12.—THOTH.

CHONSU, or CHONSU-NEFER-HOTEP,[4] the son of Amun and Mut, the third of the great Theban triad, was regarded as a healing divinity. Says Tiele: "He was resorted to for the cure of all diseases, or for the exorcism of all the evil spirits who inflict them."[5] He resembled Thoth somewhat.

From the third century before our era forward SERAPIS was highly esteemed for his healing power.[6] He was in part a Grecian conception, being first promi-

[1] Book of the Dead, ch. lxxviii. Translation by Birch, in vol. v of Bunsen's Egypt's Place, etc. The hawk is the usual symbol of Horus, just as the ibis is of Thoth.

[2] Tiele pronounces Horus to be "the God of Light, the Token of Life." History of the Egyptian Religion, p. 54.

[3] Manual of Mythology, p. 346. London, 1873.

[4] Often spoken of as the Hercules of the Egyptians.

[5] History of the Egyptian Religion, p. 154.

[6] See Diodorus Siculus, i, 25; and Tacitus, xiv, 81.

nent in Pontus, and his worship became popular in many sections of Greece and Rome; but Alexandria was his chief seat, and his serapeum there was of great magnificence and renown.[1] He was represented in various ways, often as a man encirled by a serpent.

The special personage corresponding to Æsculapius, among the Egyptians, would seem to have been IMHOTEP, EIMOPTH, IMOTHPH, EIMOTHPH, or EMEPH, a god whose shrine was first discovered by Salt,[2] the Egyptologist, at Philæ. A Greek inscription on the shrine reads: "Æsculapius, who is Imuthes, son of Vulcan." In accordance with the inscription, Sir Erasmus Wilson says: "Imhotep, the IMUTHES of the Greeks, corresponded with their Æsculapius."[3] Ebers, probably the best of authorities on the subject, says of Imhotep: "He was the son of Ptah, and named Asklepios by the Greeks. Memphis[4] was the chief city of his worship. He is usually represented with a cap on his head and a book on his knee. There are fine statues of him at Berlin, the Louvre, and other museums."[5] It is said by Tiele that "he is a personification of the sacrificial fire," that "the texts designate him as the first of the Cher-hib, a class of priests who were at the same time choristers and physicians, for the sacred hymns were believed to have a magical power as remedies, and that his worship, although of ancient date, "does not seem ever to have taken a prominent place."[6]

[1] Says Gibbon: "Alexandria, which claimed his peculiar protection, glorified in the name of the City of Serapis." The Decline and Fall of the Roman Empire, ch. xxviii.

[2] See his Essay, p. 50. [3] Egypt of the Past, p. 15. London, 1881.

[4] The capital of Lower Egypt. [5] Uarda, vol. i, p. 203.

[6] History of the Egyptian Religion, p. 94. London, 1882. Tiele remarks that Imhotep was not only called Asklepios by the Greeks, "but likewise the Eighth, thus showing that they regarded him as one of the Kabirs" (p. 95). I may add that the worship of the Kabirs, in the character

Of Imhotep I may further say, in the way of biography, that he was the son of Ptah and Sekhet, and was possibly a king of the sixth dynasty. In the Egyptian system of mythology, Ptah, "he who forms," the god of fire, was regarded as the father of the gods and the great artificer of the world. He bore a resemblance to Hephæstus,[1] a god, indeed, who had the gift of healing.

After all, it is necessary to say that there is but little evidence to establish the claim of Imhotep to the title of god of medicine. As Kenrick says, "He has no attribute which specially refers to the art of healing, and it may be an arbitrary interpretation of the Greeks which gave him the name of Æsculapius, as some applied the same to Serapis."[2] Whether he was a medical worthy or not, it appears from quotations from his teachings given in a song, recently translated from a papyrus in the British Museum, that he was of decidedly epicurean views. "Fulfill," says he, "thy desire whilst thou livest;" and again: "Feast in tranquility, seeing that there is no one who carries away his good things with him."[3]

However, as a matter of interest, I will give the name of the god in the Egyptian characters.[4] The double reed stands for a long *i*, or *ei*, the owl for *m*, and the other three figures—the table, semicircle, and square—for *h t p*. As will be observed, the *o* and *e* of the ideographic combination, *hotep*,[5] are not given. The

of cosmic deities, was early established in the region where Memphis stood. Bunsen, indeed, identifies Ptah and his seven sons with the Kabirs. See Egypt's Place, etc., vol. iv, p. 217.

[1] Vulcan of the Romans. [2] Ancient Egypt, vol. i, p. 333.

[3] Transactions of the Society of Biblical Archæology, vol. iii, p. 386.

[4] See Fig. 13, p. 104. The characters of this name are all phonetic; but very many are pictorial or symbolic. Examples of symbolic characters will be given in the chapter on amulets.

[5] An offering; food, peace, welcome.

reason of this is, that in writing, the Egyptians, like the Hebrews and others, commonly omitted the vowels, except at the beginning and end of words. The meaning of the name is rendered by Bunsen, "I come with the offering."[1]

An early Aryan divinity has been stated to be an analogue or even the prototype of Æsculapius. Mr. Faber refers to Captain Wilford as holding that the classical health and life restorer "is the Hindoo ASWICULAPA, or the chief of the race of the horse, and he further intimates that Aswiculapa was very nearly related to the two hero-gods who are evidently the same as Castor and Pollux. These were believed to be the children of the sun and the goddess Devi, the sun at the time of their intercourse having assumed the form of a horse and Devi that of a mare."[2] He hardly presents the real opinion expressed by the Captain, but, at any rate, what he has to say is not extremely important.[3]

FIG. 13.—IMHOTEP.

The ASWI, ASVI, or ASVINS were two, and were possibly the prototypes of the Dioscuri,[4] Castor and Pollux. They were connected with the sun as horses. Taking them to be forms of the Dioscuri, they might be related to the two sons of Æsculapius, Machaon and Podalirius, for these have been regarded as such,—"nothing more than a specific form of the Dioscuri," to use the words of De Gubernatis.[5] The conception of Chiron may have been in part derived from the Asvins.

[1] Egypt's Place in Universal History, vol. i, p. 400.

[2] Mysteries of the Cabiri, vol. i, p. 99.

[3] See his work on Egypt, etc., in Asiatic Researches, vol. iii, p. 392.

[4] Cooper says that they were the two deities of the morning and evening twilight, and "were the origin of the Dioscuri of the Greeks." Archæic Dictionary. London, 1876.

[5] Zoological Mythology, vol. i, p. 358.

The Asvins were worshipped from an early period by the Hindus, reference to them being made in the oldest hymns. Cox says of them, "As ushering in the healthful light[1] of the sun, they are like Asclepios and his children, healers and physicians; and their power of restoring the aged to youth re-appears in Medeia, the daughter of the sun."[2] In the "Rig-Veda" they are characterized as "givers of happiness,"[3] and are said "to be most ready to come to the aid of the destitute."[4] They were believed to be conversant with all medicaments.

THRITA of the Parsis, the TRITA of the Hindus, is a remarkable healing, semi-divine personage, of whom a great deal is said in the "Zend Avesta" and other sacred books of Aryan peoples of the east. According to the "Zend Avesta," which is from a common source with the "Vedas," he is the curer of the diseases caused by the great evil spirit, Ahriman. In the "Vedas" he is said to extinguish illness in men as the gods extinguished it in him, and he can grant long life. He drinks Soma, as did Indra, to acquire strength to kill the demon Vritra.

In the Parsi system of religion, Thrita received from the supreme god, Ahura-Mazda,[5] ten thousand healing-plants, which had been growing around the tree of life, the white Hôm,[6] the Sôma of the Hindus.

Thrita appears to have been one of the first priests of the personified source of life and health,—"the

[1] Evil has always been associated with darkness. Harmful demons have always disliked light.

[2] Mythology of the Aryans, vol. i, p. 391.

[3] See Wilson's edition, vol. iii, p. 307. [4] *Ibid.*, p. 103.

[5] Ormazd, believed to have been originally identical with Varuna of the Vedas.

[6] Believed to be the Asclepias acida, or Sarcostemma viminalis, whose juice yields an intoxicating liquor.

enlivening, healing, fair, lordly, golden-eyed Hâoma."[1] The destruction of a great serpent, Azi Dahâka, the most dreadful Drug,[2] created by Angra-Mainyu, himself a serpent, to which diseases were attributed, was one of his fabled feats.

There is much that is interesting to the physician in the "Zend Avesta," but I cannot present it here. One interesting passage I may quote. Ahura-Mazda is addressed thus: "O Maker of the material world, thou Holy One! If a worshipper of Mazda want to practice the art of healing, on whom shall he first prove his skill? On the worshippers of Mazda, or on the worshippers of the Dævas?"[3] The reply is: "On the worshippers of the Dævas he shall first prove himself." If on these the

FIG. 14.—SILIK-MULU-KHI.[4]

surgeon use the knife three times with success, "then is he fit to practice the art of healing for ever and ever."[5]

SILIK-MULU-KHI, the son of Hea, was a remarkable divinity, of whom I feel it desirable to speak. In him we have one kindly disposed toward man, a special friend of humanity, largely medical in character. What he was has been unveiled, mainly of late, through the decipherment of cuneiform inscriptions. The Babylonians prized him highly.[6] He became assimilated with

[1] Zend Avesta, vol. i, p. 141. [2] Demon. [3] Evil Spirits.

[4] The name is given in the cuneiform characters as found in Norris's Assyrian Dictionary, p. 853. It is spelled phonetically. The first three wedges are the sign or determinative of deities.

[5] Zend Avesta. Translation by Darmesteter, vol. ii, p. 92.

[6] The devotion of Nebuchadnezzar to him is indicated in the Bible (see 2 Chron. xxxvi, 7, and Daniel, i, 2). The great king went so far as to say: "Merodach deposited my germ in my mother's womb." Records of the Past, vol. v, p. 113.

Mardux,[1] or Marodach, of the Babylono-Assyrians, and Bel, of later times.[2] Space forbids me to give a long account of him. Much can be learned about him *passim* in the admirable works of M. François Lenormant,[3] and in the "Records of the Past."[4]

Silik-mulu-khi—that is, "He who distributes good among men"[5]—was, as already stated, the son of Hea, to whom he remained subject. He overcame the dragon of the deep, and is spoken of as the Redeemer of mankind, the Restorer of life, and the Raiser from the dead. He took shape among the Accadio-Sumerians.

Hea, or Ea,[6] "the master of the eternal secrets," "the god who presides over theurgical action," revealed to Silik-mulu-khi "the mysterious rite, the formula, or the all-powerful hidden name which shall thwart the efforts of the most formidable powers of the Abyss."[7] Like Apollo, he had special medical functions; indeed, Mr. Sayce observes that "he was emphatically the god of healing, who had revealed medicine to mankind."[8]

[1] In an article entitled "Nemrod et les Ecritures Cuneiformes," M. Joseph Grivel has occasion to speak of the names of the god. Amar-ud, which is apparently the same as Nimrod, is a synonym of Merodach. See Transactions of the Society of Biblical Archæology, vol. iii, p. 136.

[2] The older Bel was Elum, father of the gods.

[3] Chaldean Magic, and the Beginnings of History. To M. Lenormant mainly belongs the credit of opening up the valuable stores of learning wrapped in the Accadian and closely allied idioms.

[4] A series of small volumes, twelve in number, issued a few years ago, in London.

[5] Silik-mulu-khi is rather a descriptive title than a name. It is the designation used in the magical and mythological texts of the Accadian inscriptions.

[6] Of this serpentine god of life and revealer of knowledge, Sir Henry Rawlinson remarks that "there is very strong grounds for connecting Hea, or Hoa, with the serpent of Scripture and the paradisiacal traditions of the tree of life." See George Rawlinson's second edition of Herodotus, vol. i, p. 600.

[7] Chaldean Magic, p. 19.

[8] Assyria, its Princes, Priests, and People, p. 59. London, 1885.

As the symbol of his office, Silik-mulu-khi carried a reed, which took the place of both the royal sceptre and magic wand, and which was transmitted to the Assyrian Mardux.[1] In a hymn it is said:—

"Golden reed, great reed, tall reed of the marshes, sacred bed of the gods,

* * * * * * * * * * * * * *

I am the messenger of Silik-mulu-khi, who causes all to grow young again."[2]

Although Silik-mulu-khi's functions were largely medical, it is not to be supposed that he resorted much to the use of medicaments. For it has not yet been made very apparent that medicine, properly so called, was much esteemed by the early Babylono-Assyrian peoples. Not long ago Mr. H. F. Talbot, in an interesting article on Assyrian talismans and exorcisms, said: "Diseases were attributed to the influence of spirits. Exorcisms were used to drive away those tormentors; and this seems to have been the sole remedy employed, for I believe that no mention has yet been found of medicine."[3] This statement does not hold good now, as will be shown later.[4]

[1] Another symbol of this god was the thunderbolt in the form of a sickle, with which he slew the dragon of the deep.

[2] Chaldean Magic, p. 190. [3] Records of the Past, vol. iii, p. 139.

[4] Herodotus, who visited the country, states that the Babylonians "have no physicians; but when a man is ill they lay him in the public square and the passers-by come up to him; and if they ever had his disease themselves, or have known any one who has suffered from it, they give him advice, recommending him to do whatever they found good in their own case or in the case known to them; and no one is allowed to pass the sick man in silence, without asking him what his ailment is" (i, 197). From this it would seem that Herodotus might rather have said that the Babylonians were all doctors, or presumed to be. However, it is thought that Jeremiah refers to the practice in Lamentations, i, 12, when he says: "Is it nothing to you, all ye that pass by? Behold and see if there be any sorrow like unto my sorrow." A similar plan was certainly practiced elsewhere than in Babylonia. Strabo says that the Egyptians resorted to it (xvi), and in St. Mark it is said that the people "laid the sick in the streets" (vi, 56) in order to be healed by Jesus as he passed along.

In the cure of diseases the Babylono-Assyrian practitioners first duly guarded the entrance to the patient's chamber. Images or guardian statues of Hea and Silik-mulu-khi were placed one to the right and the other to the left. Texts were put on the threshold and on the statues, after the manner spoken of in Deuteronomy.[1] These were also placed on the brow of the patient and about the room. In bad cases recourse was had to the "mamit," something which the evil spirits could not resist. Talbot gives the following prescription from an Accadian tablet:—

"Take a white cloth. In it place the mamit in the sick man's right hand;
And take a black cloth and wrap it round his left hand.
Then all the evil spirits, and the sins which he has committed,
Shall quit their hold of him and shall never return."[2]

M. Lenormant gives a translation of an interesting magic tablet. Here is a passage from it which the conjurer, the Shaman, is supposed to speak, ending with the usual adjuration:—

"Disease of the bowels, the disease of the heart,
The palpitation of the heart,
Disease of the vision, disease of the head,
Malignant dysentery
The humor which swells,
Ulceration of the veins, the micturition which wastes,[3]
Cruel agony which never ceases,
Nightmare,—
Spirit of the Heavens,[4] conjure it;
Spirit of the Earth,[5] conjure it."[6]

What follows is part of an incantation against "the diseases of the head":—

[1] Deuteronomy, xi, 18. [2] Records of the Past, vol. iii, p. 140.
[3] Was this gonorrhœa or diabetes? See Leviticus, xv.
[4] Ana. [5] Hea. [6] Chaldean Magic, p. 4.

"The diseases of the head, like doves to their dove-cots, like grasshoppers into the sky,
Like birds into space,—
May they fly away!
May the invalid be replaced in the protecting hands of his god."[1]

Here is the remedy for "diseases of the head," as given by Hea to Silik-mulu-khi:—

"Come my son, Silik-mulu-khi,
Take a sieve: draw some water from the surface of the river,
Place thy sublime lip upon the water;
Make it shine with purity from thy sublime breath, . . .
Help the man, son of his god . . .
Let the disease of his head depart;
May the disease of his head be dispersed like a nocturnal dew."[2]

I have already stated that Silik-mulu-khi became in time assimilated with the god possessing beauty or splendor, Mardux.[3] Here are extracts from a hymn addressed to him after the change:—

"Merciful one among the gods,
Generator who brought back the dead to life,
Silik-mulu-khi, king of heaven and of earth.
* * * * * * * * *
To thee is the lip of life!
To thee are death and life!
I have invoked thy name, I have invoked thy sublimity.
* * * * * * * * * * *
May the invalid be delivered from his disease;
Cure the plague, the fever, the ulcer."[4]

[1] Chaldean Magic, p. 20. [2] *Ibid.*, p. 22.

[3] Lenormant remarks that the assimilation was probably made when Mardux had become emphatically the god of the planet Jupiter, "the great fortune" of the astrologers, which justified them in connecting with his other attributes the favorable and protecting office of Silik-mulu-khi. He was originally a solar deity.

[4] Chaldean Magic, p. 190.

CHAPTER XII.

THE PINE-CONE AS AN ATTRIBUTE OF ÆSCULAPIUS.

THE fruitful results of studies in oriental history, industriously and intelligently pursued by able and learned men in recent times, are making more and more apparent the borrowed character of many features of the civilization of Greece and other western nations. Greek, Latin, German, Irish, and other languages of the Indo-European races, have been shown to be largely derived from Sanskrit, or a source similar to it, and the various mythologies have also been proved to be more or less evolutions.

Of late, the Assyrians, Babylonians, and Accadio-Sumerians, but especially the last, who were, as is said in the Bible, both "a mighty" and "an ancient nation,"[1] have been accorded a greater influence than formerly on other peoples. There is little or no ground for doubt that the first forms of belief, as well as art, came from the East. It is certain that in the fertile region, about the lower waters of the Euphrates and Tigris, there was, at a very early period, a remarkable unfoldment of intellectual, social, and other elements of progress, from the savage state. The ideas brought with them three thousand years or more before our era, to the rich plains southward of Mesopotamia, and gathered there by the early inhabitants of the hills of Elam and their kin, the earlier inhabitants of Sumer,[2] have been potent everywhere to the westward.

[1] Jeremiah, v, 15.

[2] Or Shinar. See Gen., xi, 2. Essentially Babylonia.

These Turanians, a dark-complexioned people, were conquered by the Semites settled in parts to the west of Babylonia, by whom their culture and civilization were appropriated.[1]

The Accadio-Sumerians undoubtedly gave direction and shape to the religions of Babylonia, Assyria, Phœnicia, and other countries, including Egypt. This means a great deal, for in the earlier stages of civilization the religion, such as it may be, is a matter of the greatest possible significance, both in itself and its influence on everything else. The language of the Accadio-Sumerians long served as the sacred one in Babylonia and Assyria,[2] and has been characterized by Mr. Sayce as "the Sanskrit of the Turanian family."[3] In it are the important early cuneiform inscriptions, all the originals of which were written eighteen hundred years or so before our era.

The medical ideas of the Accadio-Sumerian were closely related to his religion; to him the cause and cure of disease were, to a great extent, in fact essentially, supernatural affairs. And thus, indeed, it has been among all early peoples. Nor is it probable that it will ever be entirely otherwise anywhere. The same feelings which prompted the dweller in Elam, or in the plains to the westward, to formulate his religion and philosophy are still experienced by humanity. Even the myth-formers are not all dead. The spirit of all the

[1] See Smith's Chaldean Account of Genesis, p. 19. Revised edition, by Mr. Sayce, 1880.

[2] The Semitic language, called Assyrian, as the one spoken by the Babylonians, including part of the Chaldeans, before the people of Assur (see Gen., x, 11) became a nation, which was later than the time of the great King Sargon (B.C. 2000); and here I may say that cuneiform inscriptions are largely Assyrian. I may add that Lenormant takes Assur to be Nimrod, and the latter Mardux, reduced to the position of a hero.

[3] Transactions of the Society of Biblical Archæology, vol. iii, p. 466.

mythologies is yet alive. There are gods of fancy to-day, as there were when Ana and Hea and Bel were in the ascendant. And they are not very different. The *nomen*, the name, may vary much, but the *numen*, the thing, for the most part, does not.

The science of the nineteenth century has not cleared away from the minds of a large majority, in even the most highly civilized nations, the belief that health and sickness are largely subject to mysterious spiritual powers. They are matters of which the populace are still apt to entertain preposterous notions. Cullen well remarks somewhere that he had found even men with trained logical faculties, such as lawyers, satisfied with reasons of any kind, advanced to explain medical phenomena. And in truth the physician deals with matters not readily understood. In the very first paragraph of his book of books, has not Hippocrates himself said: "Experience is fallacious and judgment difficult"?

However, it is not to be denied that there are many who sincerely and firmly believe that both health and disease are entirely dependent on the will of spiritual powers. Doubtless every physician has seen instances of perfect resignation, on the death of even a near relative, brought about by the notion that the bereavement was "the will of God." An innocent child, cut off by diphtheria, or scarlet fever, or some other pestilential disease, which exists only by tolerance, with a tearless mother bending over it, calm and full of the idea that it was the will of the Almighty to destroy it in the bud, as it were, is not an uncommon sight, and one which cannot fail to impress both deeply and sadly the intelligent observer. Impious and erroneous doctrine, to be sure; but, nevertheless, part and parcel of many, nay, most of the creeds of the day.

My statements are not rashly made and baseless. I might almost ask in vain for a creed in which an absolute declaration of the life and death of mortals being entirely in the hands of supra-mundane powers is not made. For example, in the chapter of the "Book of Common Prayer," on "the order for the visitation of the sick," it is said: "Dearly beloved, know this, that Almighty God is the Lord of life and death, and of all things to them pertaining, as youth, strength, health, age, weakness, and sickness. Wherefore, whatsoever your sickness be, know you certainly that it is God's visitation." For relief, the means is indicated in this petition: "O Lord! look down from heaven, behold, visit, and relieve this thy servant." There is no doubt about the meaning of these passages; and it is certain that the ideas contained in them are essentially those which were current among various peoples of remote antiquity. Of course, to one who sincerely entertains such ideas there can be no such thing as a science and art of medicine. But we know that they rarely or never stand in the way of a due resort to rational medical treatment. Truly, the human mind is, in many instances, "many-sided."

What has just been said will indicate that it is very improbable that the so-called religious literature of early times fairly represents the state of medical practice. Assuredly, one could form no idea of the state of the healing art at present from the perusal of a manual of orthodox religious literature.

However, as I have intimated above, the prevalence of an ostensible belief in the cause and cure of diseases by supernatural powers does not stand in the way of the existence and practice of a more or less rational art of healing.

The Chaldean[1] looked to the gods for the removal of the evils which afflicted him; and he had his set earthly ways by which to bring about the result desired. Supplication, sacrifice, and the like were practiced, but material means were not entirely neglected. In the sacred book of the Parsis it is said: "If several healers offer themselves together, namely, one who heals with the knife, one who heals with herbs, and one who heals with the Holy Word, it is this one who will *best* drive away sickness from the body of the faithful."[2] In another place the "Holy Word" is pronounced "the *best* healing of all remedies."[3] Evidently, one might resort to other means, if he chose. And here I may remark, that in the practices of Æsculapius there was precisely the same threefold means of cure, as will be seen by referring to the chapter on the god.

It may be affirmed with confidence that no people in either ancient or modern times has relied exclusively on the good offices of supernatural powers for the cure of diseases. According to Catlin, the Indian doctors first prescribed "roots and herbs, of which they have a great variety of species; and when these have all failed, their last resort is to medicine."[4] A reverse plan was the more common. In that interesting book, "Ecclesiasticus," written by one well informed, and even at a time when medicine was far advanced, the sick man is curiously advised to pray and sacrifice to God first, and then to give place to the physician."[5] The old Hebrew conveys the idea that, when nothing else could be done, resort should be had to medical men. He thoughtfully

[1] Kaldu, or Kaldi, was the name of a tribe of Accadio-Sumerians that rose to prominence about nine centuries before our era. The title was subsequently given to the whole race.

[2] Zend Avesta, vol. i, p. 85.

[3] *Ibid.*, vol. ii, p. 44.

[4] North American Indians, vol. i, p. 75.

[5] Ecclesiasticus, xxxviii, 13.

remarks that " there is a time when thou must fall into their hands."[1]

Now, as was to be expected, the Grecian god of medicine was viewed by some through a veil of superstition brought from the East. In connection with statues of him were things the meaning of which would be entirely unintelligible without a previous knowledge of ideas entertained in Assyria and other countries. One of these, the special theme of this chapter, is very interesting because of its historical connections. A study of it brings to light much exceedingly interesting information.

The pine- or cedar- cone, or, as some have spoken of it, the pine-apple, was figured in the hand of the chryselephantine statue of Æsculapius, made by Calamis for the temple at Sicyon, in Arcadia, as in representations of Mardux. What was the meaning of this peculiar object? Some have taken it to have been a phallic symbol. The presence of it on the thyrsus of Dionysus,[2] brought by him from the East, would seem to support that view. It has also been regarded as a flame.[3]

Whether the cedar-cone of the Sicyonian statue of Æsculapius was representative of the reproductive organ or of fire or not, it is certain that it was largely in use by the Babylonians, Assyrians, and others, to restore health as well as to overcome witchcraft and the like. One sees it in the hand of the winged, eagle-headed

[1] Ecclesiasticus, xxxviii, 13.

[2] Bacchus.

[3] Fire was duly esteemed by the ancients. The worship was closely related to that of the sun. Atar of the Zend Avesta means fire, and a personification of it, spoken of as the son of Ahura-Mazda, is characterized as "the god who is a full source of glory, the god who is a full source of healing" (vol. ii, p. 8). The Parsis and also the Hindus were forbidden to blow a fire lest the effete emanations from the system, present in the breath, might contaminate the flame. Menstruating women were forbidden even to look at it.

figure from Nimroud, now in the British Museum, and a cut of the same is given here. Two similar genii or figures, very like the gryphon of Greek mythology connected with Apollo, are represented watching, like the cherubim at the gate of Eden, over the priests who attend about the sacred tree of life,—that apple-, fig-, palm-, or somo- tree, serpent-guarded, which yields fruit or ambrosia, in which, as De Gubernatis says, "the life, the fortune, the glory, the strength, and the riches of the hero have their beginning,"[1] and which is so prominent in the sculptures and records of Oriental peoples. The object is often seen extended under the king's nose, apparently that he may inhale the vitalizing emanations from it, after the manner of the ancients' notion of the mode of reception of the "breath of life."[2] It even appears on the tree of life in some of its conventional forms. Thus, Layard says: "The flowers at the end of the branches are frequently replaced in later Assyrian monuments and on cylinders by the fir- or pine- cone, and sometimes by a fruit or ornament resembling the pomegranate."[3]

FIG. 15.—THE PINE- OR CEDAR-CONE AS SEEN IN THE HAND OF A WINGED FIGURE FROM NIMROUD.

In connection with what he has to say about the cones on the tree of life, George Smith expresses the opinion that "the Accadians brought the tradition of

[1] Zoological Mythology, vol. i, p. 410.

[2] See Gen., ii, 7. Hippocrates appears to take *pneuma*, the breath, and the soul and vital principle to be the same. It is still a common thing to hear the breath spoken of as the divine and immortal element in man.

[3] Ninevah and its Remains, vol. ii, p. 233. London, 1849. See Ex., xxviii, 33-34, and 1 Kings, vii, 41-42.

the fir-cones with them from their original seat in the colder, mountainous land of Media, where the fir[1] was plentiful."

The use of the fir-cone in the cure of disease has been made evident by recent translations of cuneiform inscriptions.[2] It is said by Lenormant that in a "magic fragment as yet inedited the god Hea, the *averruncus par excellence*, the vivifier and preserver of the human race which he has created, prescribes to his son Marduk, the mediator, a mysterious rite which will cure a man whose malady is caused by an attack of demons. "Take," says he, "to him the fruit of the cedar, and hold it in front of the sick person; the cedar is the tree which gives the pure charm and repels the inimical demons, who lay snares."[3]

FIG. 16.—THE TREE OF LIFE.

In the cedar-cone, then, in the hand of the figure of Æsculapius we have the symbol and instrument of "the life charm," of which the god Hea was the master and the son the dispenser; and I may add (as Lenormant has suggested) that when fruits of this nature adorn the sacred plant they characterize it more emphatically than ever as the tree of life.

[1] Fir-trees were regarded with much favor in the East. Ezekiel likens the Assyrian nation to a great cedar, envied by "all the trees of Eden," none being "like unto him in his beauty." Ez., xxxi, *passim*.

[2] Medical virtues are inherent in fir-trees. Hence, there was a good foundation for the Accadian superstition. It is curious to observe that "among the Dakotah tribe of Indians the white cedar-tree is believed to have a supernatural power, and its leaves are burned as incense to propitiate the gods." See Emerson's Indian Myths, p. 241.

[3] Beginnings of History, p. 90.

CHAPTER XIII.

DIBBARA,[1] A GOD OF PESTILENCE.

THERE does not appear to be an exception to the rule, that every people has, to a greater or less extent, referred the causation of epidemic and other diseases to supernatural powers.[2] In Oriental countries evil spirits were believed to be accountable for it; and, indeed, in the West, the Red Indians entertained the same notion, as the reader of Mr. Dorman's interesting book[3] is well aware. The uncultured mind cannot, it would seem, grasp the idea that things which the senses cannot readily perceive may, nevertheless, be entirely natural.

The Babylono-Assyrians, like the American Indians, believed in the existence of innumerable bad as well as good spirits; in fact, to them every object and force in nature was believed to have a *zi*, or spirit, more or less subject to control.[4] The bad ones, of whom there were seven emphatically such, delighted in injuring man and afflicting him with diseases, often taking possession of him. Evidently this doctrine, when fully developed,—that is, when the bad spirits were almost or quite as free to act as the good ones, as among the Parsis,—afforded a simple and very satisfactory explanation of the existence of apparent good and evil in the world. The practice

[1] Mr. Sayce gives the name as Lubara. See Ancient Empires of the East, p. 157.

[2] According to Mr. Black, disease and death have been referred by the unscientific to three great sources, namely: (1) the anger of an offended external spirit; (2) the supernatural powers of a human enemy; (3) the displeasure of the dead. See Folk-medicine, p. 4, published by the Folk-lore Society. London, 1883.

[3] The Origin of Primitive Superstitions. Philadelphia, 1881.

[4] See Sayce's Ancient Empires of the East, p. 146.

of medicine, based on such views, could, at best, be little better than mere Shamanism.

I may here observe that the Chaldeans and others regarded imprecations as effective in causing diseases, as well as other evils. In a quotation from a tablet, given by Lenormant, it is said :—

> "The malevolent imprecation acts on man like a wicked demon ; The voice which curses has power over him."[1]

I need hardly say that a very similar belief is still all but universal. It appears to be instructive. At any rate, it is practiced enormously. From the "damn you" of the street-urchin to the formal and solemn "anathema" of the Pope of Rome, we are familiar with all grades of it.

There has always and everywhere been a tendency to accord great divinities power to dispense both evil and good. Men have made their chief gods like themselves, anthropomorphic, variable in their feelings and actions. Apollo could cause disease and he could remove it.[2] Of the Hebrews' God the same is true. Offense at the "sins" of men in both cases inspires the infliction of pestilential and other diseases. The numbering of the people by David, although forbidden, leads to the occurrence of a destructive epidemic.[3] In "Ecclesiasticus" it is explicitly said, "He that sinneth in the sight of his Maker shall fall into the hands of the physician."[4]

Among those who clothed one evil spirit with imperial power, so to speak, that spirit has been mainly held accountable for the occurrence of disease. The Iranian,

[1] Chaldean Magic, p. 64.

[2] Says Tiele: "The operation of the sun is two-fold, beneficial and terrible; it quickens or it destroys life. The Greeks united both characteristics in Phœbus Apollo." History of the Egyptian Religion, p. 45.

[3] 2 Samuel, xxiv. [4] Ecclesiasticus, xxxviii, 15.

Angra-Mainyu, furnishes an example. And since the notion of the "devil" (our devil) began,[1] he has been often charged with the offense. Thus, we are told in the Bible that it was he that "smote Job with sores, from the sole of his foot unto his crown."[2] Still, in this case he was subject to orders, so to speak.

Now, it would be strange if, among the evil spirits the exuberant fancy of uncultured man has called into existence, there were not a leading one with the special function of causing, at least, pestilential diseases. Such a one is not met with in the mythology of the Romans, Greeks, or even the Egyptians;[3] but a remarkable one is found in the Accadio-Sumerian, Dibbara, the leader of the plague-demons.[4] He was subject to the orders of Ana and Hea. In the Izdhubar legend of the flood it is said: "Let Dibbara appear, and let men be mown down."

Our knowledge of Dibbara, or Lubara, is largely of modern date. Until the recent translations of cuneiform inscriptions were made, the records of him had almost faded out of sight. On his exploits there is an interesting chapter in George Smith's "Chaldean Account of Genesis."[5] His history promises to throw considerable light on passages in the Bible and elsewhere. Thus, his title of "the darkening one" appears to have suggested to the Psalmist the phrase, "The pestilence that walketh in

[1] It appears that the idea of the devil is first brought into clear relief in the Book of Wisdom, where it is said: "By the envy of the devil death came into the world" (ii, 25). The Hebrew demonology is usually said to be of Iranian origin, but it may just as likely have sprung from a Turanian source, either directly or through their Semitic kin in Babylonia.

[2] Job, ii, 7.

[3] Set, called Typhon by the Greeks, the embodiment of physical and moral evil, was regarded as the Egyptian god of death. Plagues were attributed to him.

[4] The plague maiden of Teutonic folk-lore is somewhat like Dibbara. See Grimm's Teutonic Mythology (translation), p. 1185.

[5] Chaldean Account of Genesis, vol. viii.

darkness."[1] He was, probably, the prototype of the destroying "angel" spoken of in the Bible.[2]

Dibbara, like many other personifications of evil, partook of the serpentine form. Not unlikely he was originally, to a great degree, similar to, if not identical with, the fabulous dragon combated by Marduk. This was an embodiment of the chaos of the deep, the principle of chaos and darkness. He was the serpent of the night, and may have been primarily the darkness overcome by the sun.

[1] Psalms, xci, 6. [2] 2 Sam., xxiv, 13 *et seq.*, and 2 Kings, xix, 35.

CHAPTER XIV.

HYGEIA, THE GODDESS OF HEALTH.

THE need of a special divinity to preserve people in a state of health was widely felt, even in very early times. In Egypt, Assyria, Greece, and elsewhere, this need found pronounced expression. Isis and Istar[1] and Athene were each, in one way or another, accorded great power over bodily or mental health. But the Greeks, in their Hygeia, markedly emphasized and entirely specialized the conception. Here we have an exclusively health divinity, who had more or less of a counterpart in the SALUS of the Romans,—a goddess highly esteemed, worshipped on set days, and to whom a fine temple was devoted at the Eternal City, situated near the gate called from it Porta Salutaris.

FIG. 17.—SERPENT AND BOWL OF HYGEIA.[2]

From the preceding statements, the reader will observe that the divinities who were specially interested

[1] The wife of Hea, the queen of the gods, Davkina, was a health goddess. In an inscription Marduk is sent to a dying man, and it is further said :—

"Sprinkle holy water over him.
He shall hear the voice of Hea.
Davkina shall protect him ;
And Marduk, eldest son of Heaven, shall find him a happy habitation."

See Records of the Past, vol. iii, p. 142. She was invoked by women in labor.

[2] This figure is copied from one given by W. R. Cooper in his essay on "Serpent Myths of Ancient Egypt." See Transactions of the Victoria Institute, vol. vi, p. 321. London, 1873.

in the preservation of health were all females. This is an exceedingly interesting fact. It is not an incongruous one, either. The ancients were keenly alive to the sense of fitness in things; and hence it is hardly likely that they made a mistake in Hygeia, the health goddess. From the exercise of the great function of nurturing and caring for the young of the species, woman has sufficient claim to the distinction of being, *par excellence*, the guardian of health. Why the goddess should be a maid rather than a matron is not extremely clear. Likely the idea was to present in her a woman just mature and free from blemish, in a typically perfect state.

However, we have in Hygeia, "daughter of Pæon, queen of every joy," to use the appropriate words with which Armstrong starts off in the invocation to her, at the beginning of his fine poem,[1] a very interesting and beautiful conception. It is easy to understand why this divinity became very popular. O Goddess! if—

> "But for thee,
> Nature would sicken, nature soon would die,"

as the author just quoted declares, thy worship might well have become universal, for without health life is burdensome, a gift of doubtful value! Health and long life are things mortals have always craved and always prized. In that interesting Hebræo-Chaldean history, "Tobias," Sara, with her husband, gives utterance to a truly human prayer: "Have mercy on us, O Lord, have mercy on us, and let us grow old both together in health."[2] "At heart," says Dr. Brinton, "all prayers are for preservation; the burden of all litanies is a begging for life."[3]

[1] The Art of Preserving Health. First published in 1744. One of the very few great medical poems.

[2] Tobias, viii, 10. [3] American Hero-Myths, p. 19. 1882.

The symbolic representation of the myth of Hygeia afforded a fine subject for the sculptors and other artists. Extremely attractive figures of her were produced. One of them, at least, is doubtless familiar to the reader. I have reference to the one in which she is represented as a blooming girl with a serpent twined around her left arm[1] and feeding out of a *patera* or chalice held in her right hand. With this ideal in his mind, the late Dr. Aitken Meigs, in a remarkable address[2] delivered in 1879, pronounces "the high-born maid" to be "of beauty's types, the highest, best idea," and continues:—

"Nor fragile she, nor pale, but ruddy, strong,
And gladsome as a tuneful, joyous song;
Her comely form, in swelling curves designed,
Is perfect grace, with glowing strength combined;
Crimson and white in her fair face contend,
Upon her cheeks in sweet confusion blend;
Her rosy lips excel the coral's brightness,
Brow, nose, and chin are fleecy ways of whiteness;
Loose, flowing, falls her hair, a golden spray;
Forth from her lustrous eyes she scatters day.
* * * * * * * * *
In one small hand a cup she deftly holds,
Whilst round her soft, white arm, in many folds
A serpent twines and from the chalice drinks.
Low crouches sometimes, at her feet, a sphinx.
From these strange emblems learn her character:
How very cunning she, and how exact her
Knowledge and profound; how with wondrous skill
Her youth renews, and is discreet and still."

As will be observed, Dr. Meigs gives an explanation of the symbols usually connected with figures of Hygeia,

[1] This arrangement of the serpent is seen in an Egyptian priestess, a picture of which is given in Cooper's essay, already referred to.

[2] It has been published, I think, in pamphlet form, but the copy I have was issued in 1882 in connection with the March and April numbers of a monthly published in the interest of Jefferson Medical College and her alumni, The College and Clinical Record. There are a dozen octavo pages of it.

whom he regarded as to the physician what the chosen maid was to the knight of old,—the patron saint. The view taken of the serpent is not satisfactory, although better than that held by Cuvier, namely, that it is "to show that temperance is the source of lengthened life."[1] And if one take the reptile to be symbolic of the art of healing, why it should be connected with the goddess of health is not clear. In this connection its presence might imply that it is only through medicine that health can be preserved. Taking it as symbolic of life, one has little difficulty in understanding its appropriateness. Closely attached to her, and drawing nourishment from a chalice held in her hand, the meaning might be, that health and life are intimately related to each other, the former sustaining the latter. Regarding it, however, as simply a *bonus genius* is not out of the way. The mode of representing it at Rome and elsewhere strongly supports this view, namely, encircling the altar of the goddess, with the head extending over it.[2] In Teutonic mythology, "the white lady with the snake" was associated with medicinal springs.

FIG. 18.—HYGEIA. (As given in Murray's Mythology.)

According to the mythological record, Hygeia[3] was the daughter of the god of medicine, Æsculapius. Of

[1] Animal Kingdom, vol. ix, p. 309. [2] See Tooke's Pantheon, p. 296.
[3] See Grimm's Teutonic Mythology (translation), pp. 588, 1150.

her personal history one might almost say that it is a blank.

Numerous representations of Hygeia were to be found in Greece, and later in Rome. One was usually placed by the side of each of Æsculapius.

The worship of Hygeia began soon after that of Æsculapius and became wide-spread and popular. The Romans were quite as devoted in their attentions to her as the Greeks.

I have said sufficient already to indicate that there was no divinity precisely similar to Hygeia in Egypt, or any eastern country. Some of the great goddesses were believed to exercise functions akin to hers.[1] Indeed, many of the prominent divinities, from the spouse of Hea down, had accorded to them more or less control over affairs of health and life. Dr. Meigs conveys a wrong impression when he says :—

> "Hygeia, daughter of Asclepios,
> Descended from Apollo Delios,
> Adored as Maut[2] beside the mystic Nile,
> With Amen-Ra in Theban peristyle."[3]

There is about as much reason to say that Athene was Hygeia, as that Maut was, or Isis, although, as Ebers says, she was the divinity "to be called on to destroy the germs of disease."[4] Arguments could be advanced in favor of the idea that Hygeia sprang into existence as a personification of the great serpent-accompanied virgin, river-mist, or cloud-goddess, Pallas Athene, in her capacity of health-preserver. The claim in regard to Isis is little or no better; and, in fact, one

[1] For Cooper's view of her origin, see quotation, p. 93.

[2] Maut, Mat, or Mut, is to Amen-Ra what Artemis was to Zeus, and Juno to Jupiter. She might be viewed as a form of the more familiar Isis, and from close relationship is often confounded with Neith.

[3] From address referred to on page 125. [4] Princess, vol. ii, p. 296.

form of Isis, called Neith, or Neit, the great mother of the sun-god, Ra, and the titular goddess of Sais, has always[1] been believed to correspond closely with Athene. The former was not only usually accompanied by a serpent, like the latter, but was often represented by one; still, the same might be said of, perhaps, all the Egyptian goddesses.

[1] See Plato's Timæus.

CHAPTER XV.

MEDICAL TALISMANS.

It is well at the start to form a definite conception of what a talisman means. It is a species of charm; it differs from an amulet. Both are of the character of fetiches; that is, objects in nature, or of art, believed to possess magical power. If the object be ascribed consciousness and other mental attributes, it is, properly speaking, an idol. Unlike the amulet, the talisman, to be effective, need not be kept about the person. But the main characteristic feature of the talisman is astronomical, or, rather, astrological; it is accorded virtue principally because made when two planets are in conjunction, or when a star has reached its culminating point. As one would expect, it has been customary to have something about the talisman to indicate that it is such; but many engravings found on them have no astronomical import at all.

The talisman[1] has a long history. To know when it came into use one must go back to the time when the study of the stars and their influence, real or supposed, on mundane affairs began. Although it has been asserted[2] that Adam acquired a knowledge of astrology through inspiration, it is safe to hold that the Accadian[3] star-gazers, inhabitants of the hills of Elam, first gave shape to this, in great part, pseudo-philosophy of nature,

[1] The famous one brought from the East to Scotland and called the "Lee-Penny" has an interesting history. Sir Walter Scott speaks at length of it in his work, "The Talisman." Says the great novelist: "Its virtues are still applied to for stopping blood and in cases of canine madness" (p. 287).

[2] By Josephus.

[3] The name signifies highland.

which was widely believed in by many peoples, and still has numerous sincere adherents everywhere. Mr. Proctor ventures to declare that "the idea that the stars in their course rule the fate of men and nations "[1] is a predominant one of the race.[2] In Babylonia, Assyria, Phœnicia, Egypt, and elsewhere, it received much attention; indeed, it was part and parcel of the prevailing religions, most of the Oriental systems being largely astronomical in origin. And the Chaldean or, rather, Accadian astrologer's work is obvious enough to this day;[3] it is seen in the division of time into the week of seven days, with the seventh one of rest, the Sabbath,[4] and the mode of regulation of religious times and seasons,[5] to say nothing of the signs of the zodiac, and so on.

It is stated by Vitruvius[6] that astrology[7] was

[1] The Great Pyramid, p. 159.

[2] It stands out prominent in the first chapter of Genesis. The whole host of heaven was created for earthly purposes.

[3] The reader of the Book of Daniel learns much of the repute of the Chaldeans as astrologers. The Romans were in the habit of calling all astrologers Chaldeans. That people, I may say, never gave the class legal countenance.

[4] In an old Accadian tablet bearing on the observance of the Sabbath by the king, it is said, among other things: "Medicine for his sickness of body he may not apply." See Smith's Chaldean Account of Genesis, p. 89.

[5] According to the Bible narrative, which Lenormant says is "a tradition whose origin is lost in the night of the remotest ages and which all the great nations of Western Asia possessed in common, with some variations" (Beginnings of History, p. xv), the luminaries were placed in the heavens "to divide the day from the night and to be signs for the time of festivals, the days and the years" (Gen., i, 14). This is from the Elohist version, which, with the Jehovist, may be found in Lenormant's work. The ordinary version was drawn from the two.

[6] Architecture, p. 219, 2d ed. By Joseph Swift. London, 1860.

[7] It is well to state that the astrologer was the forerunner of the astronomer. In his interesting book on The Astronomy of the Ancients, Sir J. Cornwall Lewes says: "The word ἀστρολογος signifies an astronomer in the Greek writers. The word *astrologus* has the same sense in the earlier Latin writers. In later times the distinction which now obtains between the words astrology and astronomy was introduced" (p. 292).

brought from the East to Greece[1] by the Chaldeans, of whom Berosus, the historian, "the first of them," settled at Cos and opened a school there. However this may be, it is stated in Ptolemy's remarkable book[2] that medical astrology originated in Egypt.

Hippocrates, who lived a century or so before Berosus, had certainly a knowledge of astrology. Galen wrote a book on it, and, like Hippocrates, gives special prominence to the influence of the moon, dwelling particularly on its production of critical changes in diseases. Many another physician thought it necessary to master it,[3] including Chaucer's "Doctor of Physick," who was "grounded in astronomie."[4]

From the fact that astrology and religion were closely connected, it almost necessarily followed that medical talismans possessed more or less of a religious significance.

Among the talismanic gems pictured in De Wilde's book[5] is one which has on one side the Greek letters IAΩ, signifying the Creator of the world, or Jehovah; and on the other a representation of an extremely *erotic* and rather misshapen lion rampant. This, worn in a ring, was said to prevent renal and other diseases. De Wilde observes, in accordance with a belief of ancient date, that in this figure one has health symbolized. Says he: "*Leo erectus verum signum sanitatis protendit.*"

What has just been said leads me to remark that the *phallus*, which was a common form of the *genius loci*, or

[1] The Greeks generally gave Atlas the credit of introducing it. See Cory's Ancient Fragments, p. 82. Hodges' edition.

[2] Tetrabiblos, i, 2.

[3] In "A Plea for Urania," issued in 1854, it is said that "less than two hundred years ago an individual who entered upon the profession of doctor of medicine, either in England or any of the European countries, was obliged to pass an astrological examination" (p. 246).

[4] Canterbury Tales. [5] Gemmæ Selectae. Amsterdam, 1703.

Agathodæmon, was widely believed to have great power to protect against harm. In it was a sovereign preventive of malign fascination, or the influence of the evil eye. The Roman god, Fascinus,[1] had it as his chief symbol. It is well known that this charm was sometimes placed on houses[2] in Pompeii, with the inscription, *hic habitat felicitas.* Aubrey says: "In the digging of the ruins and foundations of London, after the great conflagration, there were found several little Priapusses of copper, about an inch long, w^ch^ the Romans did weare about their necks."[3]

In regard to the IAΩ, JAΩ, or JAO, a variation of

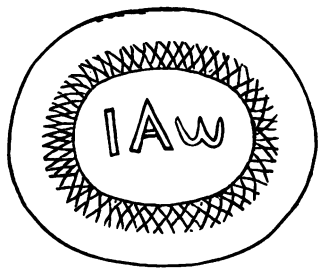

FIG. 19.—THE DIVINE NAME. (As seen on a talismanic gem, copied from De Wilde's book.)

JAH,[4] the name of the Deity, the demiurge, the Sabaoth of the Phœnicians and others, I may say that it was regarded as possessing in itself irresistible talismanic power. Fort remarks that "as a talisman of medical properties it was carried about the person in tubes, or, more generally, on parchment."[5] Let me add that the

[1] Fascinum and penis are Latin synonyms.

[2] This is still done in parts of China and elsewhere in the East.

[3] Remaines of Gentilisme and Judaisme, p. 32. London, 1880. Republication by the Folk-lore Society. First issued 1686-'87.

[4] See Psalms, lxviii, 4, and lxxxix, 8.

[5] Medical Economy during the Middle Ages, p. 92.

Tetragrammaton—that is, J H V H, or, as it is commonly rendered, Jehovah—was the same thing as the IAΩ. Much could be said about it, as those familiar with Masonic legends and occult literature are aware. Lenormant states, of the wide belief in the power of the hidden "name of the Lord," that "we now see clearly that it came from Chaldea."[1] Elsewhere, reference is made to the potent word which Hea bore in his heart.

In this connection I may say a word on the "triliteral monosyllable" of the Brahmin and Buddhist, AUM, to which still, as in the past, great potency is attached. Being a symbol of the Supreme, it is characterized as "that which passes not away." Dr. Birdwood remarks that it is "the identical formula of every Hindu

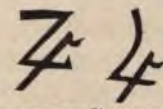

FIG. 20.—FORMS OF THE PRESCRIPTION SYMBOL.

god. The letter A is the *vija-mantra* of the male Buddha, the generative power; U, the ditto of the female *dharma* (law), the type of productive power; and M, the *sanga* (congregation) or union of the essences of both."[2]

The symbol placed at the head of medical prescriptions, and which is usually believed to stand for *recipe*, may be regarded as a sort of obsolete talisman. The original form of it appears to have been a figure like a Z, with the lower horizontal part crossed with a sceptre-shaped line. This, or a modification of it, has been from time immemorial the symbol of the planet Jupiter. Hence the reason, it has been asserted, for placing it at the head of prescriptions; for the great planet, the

[1] Chaldean Magic, p. 43.

[2] Indian Arts, p. 104.

bearer of the name of the father of life, was believed in other days to have a favorable influence over diseases. And here I may observe that in another chapter I have spoken of the interesting fact that Marduk[1] of the Babylono-Assyrians stood for Jupiter, and that in him was assimilated the benignant mediator and healer of the Accadio-Sumerians, Silik-mulu-khi.

The symbol is generally described as being simply the initial letter of Zeus, the Greek name of Jupiter. But this leaves part of it out of account, a part which might be taken to be a sceptre, an object which, accompanied by a serpent, as the symbol of life, was prominent in representations of Jupiter. But one might with some reason regard it as made up of the initial and terminal letters of Zadykiel, or Zadakiel, the angel and the spirit of the great planet, according to astrologers and others. And again, by taking it to be composed of an R and an l, one might hold it to be derived from the name of Raphael, the angel of the sun. But, as already stated, it is probable that the body of the original figure was not an R. I may add that Mr. Taylor says that this ideogram "resolves itself into an arm grasping a thunderbolt."

If the prescription-mark be a thing of astrological origin, it is a remnant of an extensive body of facts and theories, long highly prized. Shakspere makes *King Lear*, in an interesting passage, characterize the reference of man's destiny "to the sun, the moon, and the stars," as "the excellent foppery of the world;"[2] but no doubt innumerable hosts of believers in the system were thoroughly sincere. From the days when the Accadians became distinguished for their observations of the

[1] The star of Babylon is frequently spoken of in the Inscriptions. The star of Marduk is the same. It is Dilgan, or Jupiter.

[2] Act I, Scene 2.

heavens, down to very recent times, medical astrology occupied a position in popular thought and esteem which almost exceeds the power of credence of the modern scientific physician. Not only in administering medicines, but in gathering medicinal herbs, the position of the planets had to be considered; for it was believed that the herbs got their virtues from them. Without the benign influence of the "host of heaven," no good could be expected from the physician, or his remedies.

The belief in the power of the different constellations of the zodiac over special parts of the body and their diseases is still indicated by the curious figure often seen in almanacs.

ABRAXAS-STONES are largely medical in character—medical talismans.[1] Much might be said of them. Fort remarks: "These gems, endowed with omnipotent curative and talismanic power, quickly acquired a celebrity undiminished for ages, and whose possible interpretation even yet attracts erudite attention."[2]

Each of these remarkable objects consisted of a piece of glass, paste, or other mineral substance, occasionally a metallic one, on which was usually some figure, often a serpent, or inscription, together with the word "abraxas," which constituted their distinctive feature.

The Greek letters of the mystical word, "abraxas," equaled in numerical value 365,[3] the number of days in the year. After speaking of the serpent of evil on one, Sharpe says: "Underneath it is written the magical word Abrasa, *hurt me not*, an Egyptian word, which the

[1] ABRACADABRA is not the same as abraxas, but may have been derived from it. In the third century, and later, it was regarded as a capital remedy for malarial fevers.

[2] Medical Economy during the Middle Ages, p. 94.

[3] The letter Alpha = 1, Beta = 2, Rho = 100; Alpha = 1, Xi = 60; Alpha = 1, and Sigma = 200.

Greeks made use of, as believing that the evil spirits were better acquainted with the Egyptian language than with the Greek."[1] Not a few, however, believe that the word is not such at all.

The abraxas-stones are believed to have originated with the Basilidian Gnostics, a sect which Basilides, a

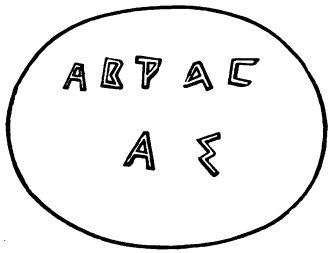

FIG. 21.—ABRAXAS-STONE. (From De Wilde.)

Syrian by birth, who lived under Trajan and his successor, in the latter half of the first century, was instrumental in originating. Whether they were intended at first to be simply a means of recognition is an undecided question. Those given to magic adopted them largely. The opinion has been expressed that doubtless the greater part of the stones were made in the middle ages.[2]

[1] Egyptian Mythology, p. 93. [2] Chambers' Encyclopædia.

CHAPTER XVI.

MEDICAL AMULETS.

ANY object believed to be possessed of a mysterious power of warding off or removing evil of any kind may be regarded as an amulet. A medical amulet is one capable of warding off or of removing a disease or diseases. The prevention of disease, or, what is much the same thing, the preservation of health, is the use to which it has been chiefly put. This is quite as true of its use to-day as formerly.

In speaking of medical amulets one has no reason to use only the past tense. They are still much used, as the reader of Brande, or of the publications of the Folk-Lore Society, or of *Notes and Queries*, well knows. Nor are the patrons of them of the illiterate class only. Every physician has, doubtless, met with instances of their use by persons of intelligence. Here is a clergyman who carries a chestnut in his pocket to keep off rheumatism; and there is an attorney-at-law who keeps a stolen potato about him for the same purpose. In ancient times, however, their use was extremely common, all but universal.

Of the practical value of amulets I may say, without hesitancy, that it is very great. Of course it would be irrational to hold that they act, to any extent, otherwise than through impressions made by them on the mind. Such impressions may undoubtedly be powerful for good. That this is the case few competent to form an opinion on the subject will question. The intelligent reader of history, as well as the scientific psychologist

and physician, has abundant reason to know that it is true. I repeat what I have deliberately said elsewhere: "Amulets do serve, in a measure, to prevent disease. Anything which inspires confidence and hope is sanative in its effects. Faith is a powerful healer."[1]

A gem with a symbol of one kind or another engraved on it was, from an early period, an ordinary medical amulet. A common symbol was a figure of Hygeia; and one of Serapis was long quite as common. The name of Raphael (literally healer of God), the patron angel of the early Christians, was often shown on both amulets and talismans. This angel had a reputation as a healer,[2] as the reader familiar with "Tobias" is aware. In that historical book, it is said that when Tobias and Sara were afflicted "the holy angel of the Lord, Raphael, was sent to heal them both."[3] Tobias was told by him that if he put a little piece of a fish's heart upon coals the smoke thereof would drive away all kinds of devils, either from man or woman, and that they would not return.[4]

A serpent was a very familiar object on gems used as amulets. The later Egyptians, who were great believers in such things, were very partial to it. Among the objects found by General Di Cesnola, in Cypress, was a scarabæoid of banded agate, on which are engraved two asps with a cartouche between, inscribed with the word εχις. In reference to this word he says: "It can be no other than ἔχις, the old form of εχιδνα,

[1] The Care and Culture of Children. Philadelphia, 1880.

[2] It is worth while to observe that Raphael was, according to the Cabbala, the angel of the sun.

[3] Tobias, iii, 25.

[4] Nearly all savage and semi-civilized peoples have viewed the heart as a very mysterious organ. Not a few have regarded it as the epitome or soul of the individual. In sacrifice it has played an important rôle. See Albert Reville's work on The Native Religions of Mexico and Peru, p. 43. New York, 1884.

and may possibly be a proper name after the analogy of Draco, not uncommon in Greece; and Echidna, whose amour with Hercules Herodotus relates. Or, if taken in its primary sense the word may constitute an amulet against the asps, still so plentiful in Cyprus, and to be of the nature of those prophylactic rings against snake-bites alluded to by Aristophanes.[1] Arab amulets, at the present day, bear the figure of the thing against which they exert their virtue, and all Oriental practices in this line come down from immemorial antiquity."[2]

I may remark that the use of images of things feared to save from them has, indeed, been extensively practiced. The cause and the effect, in many afflictions, might be so used. The golden emerods and mice, spoken of in the Bible, are instances.[3] The same idea may have had something to do with the use of the brazen serpent of Moses. The Chaldeans, in resorting to this peculiar plan of dealing with their evil spirits, represented them, says Lenormant, "under such hideous forms that they believed that it was sufficient for them to be shown their own image to cause them to flee away alarmed."[4] And this leads me to say that great medical virtues have been held to spring from things repulsive. Thus, water drank from the skull of a suicide has received credit for the cure of many a case of epilepsy. Tasting the blood of a murderer has been resorted to successfully in cases of the same disease.

A word in this connection about ADDER-STONES may not be amiss. These objects have long been regarded by many as charms or amulets of great power. They are simply the whorls or rude fly-wheels put on spindles

[1] There is the ring of the Zend Avesta and the cuneiform inscriptions about it also.

[2] Cyprus, p. 384. London, 1877.

[3] 1 Sam., vi, 4 *et seq.*

[4] Chaldean Magic, p. 50.

of spinning-wheels. Dr. A. Mitchell discusses them at length in his interesting archæological work.[1]

Under the head of medical amulets are to be classed many things, such as BLESSED OBJECTS and RELICS of various kinds. The extent to which these were used, century after century, down even to our own day, is surprising. The interested reader may advantageously turn to Fort's learned work.[2] The sprinkling of "holy water"[3] over patients by pious Catholics is familiar to every physician. I have seen a few drops of water from Lourdes given by a priest to his mother, sinking from lung disease. A few weeks ago I saw a cup of water in which a little earth from Knock, in the south of Ireland, was mixed, given with great confidence in its power for good, in a case of difficult labor. In the "Zend Avesta" wonderful virtue is ascribed to *gomez*;[4] and the same thing is equally lauded in the sacred books of the Hindus. What strange beliefs mortals may have!

Certain NUMERALS have had remarkable properties accorded them by philosophical and other speculators. SEVEN has occupied a prominent position. The primitive Chaldeans, in their study of the heavens, became acquainted with seven planets, including the sun and moon, and their week consisted of seven days. With the Egyptians and others the same was the case. Pythagoras saw in this number the three of the triangle and the four of the square,—the two perfect figures. It was considered sacred to Helios and also Apollo. The Hebrew *sheba* means seven, and was the symbol of a

[1] The Past in the Present, p. 19 *et seq.* 1881.

[2] Medical Economy during the Middle Ages. New York, 1883.

[3] A practice long in use. See p. 110.

[4] Urine of oxen. The supposed virtue sprang from certain mythological notions.

deity[1] before it came to signify an oath. As a charm or amulet, the number was believed to be possessed of great potency. Health was assured by carrying it about the person on a gem or the like. Ebers illustrates this superstition in one of his splendid historical novels; he makes Boges, in giving a ring to Crœsus, speak thus:—

"Take this ring. It has never left my finger since I quitted Egypt, and it has a significance far beyond its outward worth. Pythagoras, the noblest of the Greeks, gave it to my mother when he was tarrying in Egypt to learn the wisdom of our priests, and it was her parting gift to me. The number seven is engraved upon the simple stone. This indivisible number represents perfect health, both to soul and body, for health is likewise one and indivisible. The sickness of one member is the sickness of all; one evil thought allowed to take up its abode within our heart destroys the entire harmony of the soul. When you see this seven, therefore, let it recall my heart's wish that you may ever enjoy undisturbed bodily health and long retain that loving gentleness which has made you the most virtuous and, therefore, the healthiest of men."[2]

As already intimated, the Chaldeans attributed special virtues to certain numbers, of which seven would seem to have been the most highly esteemed. Unfortunately, none of their numerical formulæ have as yet been discovered. The "mamit" or "number" has been referred to before. Lenormant remarks: "More powerful than the incantations were conjurations wrought by the power of numbers. In this way the supreme secret

[1] It was probably connected with the god Sbat and the Egyptian Seb or Cronus, the father of Osiris. See Transactions of the Victoria Institute, vol. xvi, pp. 136 and 160. London, 1883.

[2] The Princess, vol. i, p. 210.

which Hea taught to his son, Silik-mulu-khi, when he consulted him in his distress, was always called 'the number.'"[1]

A remnant of the old belief in the relation of seven to health is the wide-spread superstitious notion that the seventh son of the seventh son is possessed of special healing powers. Curiously enough, I had a visit from such a person, just before writing this; and he as firmly believes that he can cure "the evil" and other ills with certainty as any king that ever exercised the royal gift.

The color RED has long served the purpose of an amulet. To this day a red string is occasionally seen around the necks of children to protect them against scarlet fever and other pestilential diseases; and the belief in the special virtue of red flannel is almost universal. Says Aubrey: "Johannes Medicus, who lived and wrote in the time of Edward II, and was Physition to that king, gives an account of his curing the prince of ye small-pox, a disease but then lately known in England, by ordering his bed, his room, and his attendants to be all in scarlet, and imputes ye cure in great measure to the virtue of ye colour."[2] The same was done in the case of the Emperor Francis I, in 1765.

Of red it is certainly true that it is a warm color; and the impression of it on the mind is stimulating. Experiments have shown that different colors exert various influences over living forms, including man.

But, although medical virtues have been ascribed to red, it has been looked on as anything but good. Says Ebers: "In the 'Papyrus-Ebers' all injurious and evil things are called red."[3] The scorching sands of the desert, likely, gave the Egyptian his dislike to the color.

[1] Chaldean Magic, p. 41.
[2] Remaines of Gentilisme and Judaisme, p. 49. [3] Uarda, p. 118.

In the Hindu book of the law,[1] a man is forbidden to marry a girl with reddish hair, but why is not stated. Satan is usually given a suit of fiery hue.

The ANKH was a symbol of the Egyptians signifying life. It received the Latin name of *crux ansata*, or handled cross, from its shape. Sometimes it is spoken of as the key of life. Each of the great divinities carries one. "We do not know," says Kenrick, "the reason why life was represented by the *crux ansata*."[2] It seems, however, that the object was at first simply a crossed pole, used to measure the degree of rise in the waters of the Nile during the period of flood, an annual occurrence of vital importance to the inhabitants of the historic region. From this originated, according to Pluche and others, the meaning of life attached to it. In the hand of Thoth, a serpent was sometimes twined around it. From it has sprung, according to Gerald Massey, many modern symbols and words. "It is extant," says he, "in the great seals of England, in a reversed position, as the token of power and authority;"[3] and he ventures to affirm that "to be anxious is to be very much alive."[4]

FIG. 22.—ANKH, OR CRUX ANSATA.

Regarded as a TAU or T[5] with a link attached, it was often interpreted as Typhon chained. As such it was customary to suspend it as an amulet from the necks of children and sick people; and it was connected with the

[1] Institute of Menu, p. 154. [2] Ancient Egypt, vol. i, p. 254.
[3] A Book of Beginnings. London, 1881. [4] *Ibid.*, p. 101.
[5] T served some as a symbol of the generative power. John Davenport says that it was "used indiscriminately with the Phallus; it was, in fact, the Phallus." Aphrodisiacs and Anti-Aphrodisiacs, p. 13. London, 1869. Privately printed. Payne Knight states that the male organs represented as "the cross, in the form of the letter T, sometimes served as the emblem of creation and generation." Worship of Priapus, p. 48.

wrappings of mummies. M. Pluche, who has gone at length into this interesting subject, says: "This custom of bridling the powers of the enemy, and of hanging a captive Typhon about the necks of children, of sick persons, and of the dead, appeared so beneficial and so important that it was adopted by other nations. The children and the sick most commonly wore a ticket, whereon was a T, which they looked upon as a powerful preventive. In process of time, other characters were substituted in the room of the letter T, which was at first engraved on this ticket, but of which the other nations understood neither the meaning nor intention. They often put a serpent on it, an Harpocrates, or the object of the devotions in vogue; nay, sometimes ridiculous figures, or even some that were of the utmost indecency. But the name of *amulet* that was given to the ticket, and which signifies the removal of evil, most naturally represents the intention of the Egyptians, from whom this practice came."[1]

FIG. 23.—HEALTH, IN HIEROGLYPHICS.

A SCEPTRE (Tem), which, alone, may signify strong, in connection with the ankh stands for strong life, or health. This combination is seen on one of the faces of the obelisk now in London.

TOUCH-PIECES, or golden eagles, were special coins first issued by King Henry VII to persons "touched for the evil." One side of the piece bore an angel standing on a dragon, with the inscription, *Soli Deo gloria*, and the other a ship in full sail. Some had other designs. A hand extending from above was often given, —an old symbol of healing, being in use in Egypt, and generally having in connection with it a serpent, or a

[1] History of the Heavens, vol. i, p. 259.

figure of Serapis.[1] The hand of the Lord so frequently spoken of in the Bible may have suggested it. Specimens of those issued by Charles II and James II are to be seen in the collection of coins now in the Pennsylvania Museum and School of Industrial Art, Memorial Hall, Fairmount Park, Philadelphia. There are cuts of several in Pettigrew's work.[2]

The touch-pieces were carefully preserved and used as amulets.

The practice of touching for the evil by English sovereigns, from Edward the Conqueror down to Queen Anne, did not originate with them. Tacitus[3] gives an interesting account of the cure of a case of blindness and of one of paralysis, in the same way, by Vespasian. Every Bible-reader knows that it was resorted to in Palestine. But it was in vogue in Greece three centuries before our era. In his "Life of Pyrrhus," Plutarch says: "It was believed that he cured the swelling of the spleen by sacrificing a white cock, and with his right foot gently pressing the part affected, the patients lying upon their backs for the purpose. There was no person, however poor or mean, to whom this relief, if requested, was refused. He received no reward except the cock for sacrifice, and this present was very agreeable to him."

The MEDICINE-BAG of the North American Indians has been almost universally regarded by that race as of wonderful virtue in warding off harmful influences of all kinds. It has served them as a preventive, and also, like Prince Ahmed's apple, as a cure for every disease. Catlin says he found that "every [male] Indian, in his

[1] See Occult Sciences, p. 222. A volume of the Encyclopædia Metropolitana. London, 1855.

[2] Superstitions Connected with Medicine and Surgery. London, 1843.

[3] Historiaum, iv, 81.

primitive state, carries his medicine-bag in some form or other, to which he pays the greatest homage and to which he looks for safety and protection through life."[1] The same writer, who, I may remark, had a very wide acquaintance among Indians, pronounces it to be "the key to Indian life and Indian character."[2]

The contents of this mysterious bag, this "bag of wonders," are preserved a secret, one which none wishes to discover. These consist of a medicinal herb, or the like, with some packing-material, such as dried grass or moss.

FIG. 24.—A MEDICINE-BAG.

The medicine-bag is formed from the skin of a human being or some reptile, bird, or other creature. The suggestion of the substance to be used was left to a dream, inspired by the "great spirit," and experienced during the fast indulged in about puberty, the time when the Indian "makes his medicine;" that is, learns what animal is to be his guardian, as it were. Various ornaments are attached to it.

The medicine-bag is attached to the belt or carried in the hand. No other possession could be compared with it in value, and money could not buy one. It is buried with its owner.

As already hinted, the medicine-bag is not considered of medical import only; it is believed to have a power over all injurious influences. By "medicine" the Indian has reference to everything he cannot understand. Catlin and others are doubtless right in their opinion that it came from the French word for doctor, *medécin*.

[1] North American Indians, vol. i, p. 70. Philadelphia, 1857. [2] *Ibid.*

It is the *manito* or *manitou* of the Algonkin, the *oki* of the Iroquois, and the *teotl* of the Aztec. And, curious to observe, these words also mean serpent.

I may also explain here that the "medicine-man" is not alone the physician; he deals with the mysterious generally. There were three kinds: the Jossakeeds, or seers or prophets; the Medas, or medical practitioners; and the Wabenos, a class that indulged in night orgies.

In Miss Emerson's book it is said that "the dress of the Medas of the celebrated Mandan Indians, whose tribe is now extinct, was a medley of the animal and vegetable kingdom. All anomalies in nature were used as of great medical effect in the construction of this professional guard. The skin of the yellow bear usually formed the most important feature of the dress, and to this was sometimes attached the skins of snakes and the hoofs of deer, goats, and antelopes."[1] The appearance of such a "doctor" was surely sufficient to frighten away most of the evil spirits which were the source of human ills.

[1] Indian Myths, p. 230.

CHAPTER XVII.

PHARMACISTS' SYMBOLS.

THE art of the pharmacist is old; it is assuredly of prehistoric origin. The reader of Dioscorides or of Pliny is astonished at the number of herbs and other things used as medicines and the complexness of many popular prescriptions. Referring to the pharmacist, it is curiously observed, in "Ecclesiasticus," that "of his works there shall be no end."[1] In other days than ours there was evidently a morbid taste for the multiplication of remedies of doubtful worth,—a deplorable infirmity of many physicians.

It is stated by Ebers, in his "Egyptian Princess," that each of the Egyptian temples had its laboratory and apothecary. There is a list of two hundred drugs which were kept in the temple of Edfu. But just when the preparation and sale of medicines became a special business cannot be stated. In early times it was customary for the physician to compound his own prescriptions, as is done in rural places yet. Mr. Fort remarks that "toward the conclusion of the third century the first indications present themselves of the existence of a class of [Roman] citizens to whose vigilant care was confided the preparation of medicaments ordered by attendant physicians."[2] The same writer says: "The storage of medicinal supplies seems to have approximated the pharmacy in the twelfth century, although even earlier the word *apothecary* appears to have been

[1] Ecclesiasticus, xxxviii, 7.

[2] Medical Economy during the Middle Ages, p. 27.

interchangeable with the booth where assorted wares were offered at public sale."[1] At the end of the twelfth century the Bishop of London was named *apothecarius*, or pharmacist, to King Henry,—a fact which proves that the art of Bolus was then, at least, highly esteemed.

Now, although the establishment of the pharmacist has mysteries in abundance connected with it, the special symbols pertaining to the business are but few. The chief and most characteristic one is the MORTAR AND PESTLE. In Larwood and Hotten's interesting book it is said: "One of the signs originally used exclusively by apothecaries was the mortar and pestle, their well-known implements for pounding drugs."[2] In an attractive form and generally gilded, it is to be seen at nearly all pharmacies in this country. Only occasionally is it pictured. I know an instance in Philadelphia where Cupid is represented in connection with it; but this is as absurd an addition as the negro youth who is using the pestle in another. An eagle—the national bird—is sometimes represented hovering over it. The pestle used for grinding corn was deified by the Romans under the name of Pilumnus. In connection with the mortar it is highly spoken of in the sacred books of the Hindus.

FIG. 25.—MORTAR AND PESTLE.

The skull and cross-bones has come to be of pharmaceutical significance. Placed on the label of a vial, it implies that the contents are poisonous, and should be used with intelligence and care. It has been in use from an early date as an emblem of death. Formerly, it was often placed on tombstones.

[1] Medical Economy during the Middle Ages, p. 307.

[2] History of Sign-Boards, p. 341. Second edition. London, 1866.

BOTTLES or VASES, colored or containing colored liquids, are of pharmaceutic import. The question of the origin of their use as signs is often asked. It cannot be definitely answered. But, as to how the custom originated one may confidently say that it arose from the common-sense desire of the dealer in medicinal wares to make the fact obvious to the passer-by. The confectioner does essentially the same thing, and so, indeed, do the grocer and many others.

By turning to Larwood and Hotten's book it will be seen that a golden bottle has been used as a banker's and a goldsmith's sign; also, that bottles of various kinds have in other days, as now, decorated many a tavern-front.

Hence, a bottle or vase can hardly be regarded as a symbol, and much less the exclusive symbol of a dealer in medicines. If it were similar in every instance, and had something special in its form or color, or both, it might be so regarded.

As it is, one cannot very well regard it in any other light than as a part of the dealer's ordinary stock. Still, it must be said that there is something decidedly distinct and special about it, as seen in the pharmacist's window.

In this country, at least, the shape of the vase or vases (for there are generally three or four) and their color are not subject to any rule; and, in fact, there are a few stores in Philadelphia in which there are none. The favorite colors seem to be light green, claret, light blue, and amber.

It is very probable that the presence of special colored liquids in show-bottles does not date back much farther than, if as far as, 1617,—the time when the apothecaries became a distinct class from grocers, in

England. Certainly, some of the beautiful shades of color are very modern.

Exhibiting bottles containing actual medicines is doubtless a much more ancient practice than that of exhibiting them for the sake of their own showiness or that of the solutions placed therein. That has, in all probability, been customary from the time when dealing in drugs began. When was that?

It is known that the art of the pharmacist and trading in drugs were practiced at an early period in Egypt. Thus, in the "Papyrus-Ebers," which was written 1600 years before our era, we learn that for most diseases remedies were prescribed, drawn from all three kingdoms of nature, and in some instances were brought from distant lands. The prescriptions, I may add, were compounded according to exact weights and measures. Two recipes for pills are given: one with honey for women, and one without it for men. One for the preparation of a hair-dye, ascribed to the mother-in-law[1] of the first king of Egypt is given, which Ebers states[2] to be the earliest of all recipes preserved to us, the date of its origin being about 4000 B.C.

I could give many Egyptian and other ancient references to fancy vessels of glass and other materials used in the pursuit of ministering to the sick. One extremely interesting direct reference to the use of medicinal vases at a very early date has recently been brought to the attention of the public. I refer to a translation of an Assyrian fragment made by Mr. J. Halevy, given in "The Records of the Past."[3] It is so interesting from several points of view that I will give it here in its entirety :—

[1] Schesch. [2] Princess, vol. i, p. 296.
[3] The Records of the Past, vol. xi, p. 159. London, 1878.

"For the eruptions and humors which afflict the body:
Fill a vase which has held drugs with water from an inexhaustible well;
Put in it a shoot of —— a —— reed, some date-sugar, some urine, some bitter hydromel
Add to it some ——;
Saturate it with pure water [and]
Pour upon it the water of the [sick] man.
Cut reeds in an elevated meadow;
Beat some pure date-sugar with some pure honey;
Add some sweet oil which comes from the mountain;
Mix them together.
Rub [with this ointment] the body of the [sick man]."

The reference to the "art of the apothecary" made in the Bible[1] has been regarded as "the first recorded notice upon the subject of medicine and pharmacy,"—as, for example, by the late professor, Dr. George B. Wood;[2] but here we have explicit evidence that farther back, say 1000 years before the time of Moses, people were in the habit of having medicines stored in vases of a set kind, and that the Babylonians had considerable pharmaceutical knowledge, as well as that their medical practice was not exclusively magical; or, as Mr. Halevy puts it, "it proves that the Babylonians were in the possession of a rational medicine as well as a magical one."[3] He further remarks that it is "the only known specimen of an Assyro-Babylonian prescription."

[1] Ex., xxx, 25-35. In the revised translation apothecary becomes perfumer.

[2] Introductory Lectures and Addresses on Medical Subjects, p. 54. Philadelphia, 1859.

[3] Mr. Sayce, writing in 1884, states that "the fragments of a work on medicine closely resembling the Egyptian Papyrus-Ebers have recently been found" (at Babylon). Ancient Empires of the East, p. 173.

CHAPTER XVIII.

MISCELLANEOUS MEDICAL SYMBOLS.

THE BARBER'S AND SURGEON'S POLE.—The peculiar pole made use of by barbers as a sign seems to have been medical in origin. For a long time the barber performed all the duties of the surgeon. It was in the year 1461 that, on petition, King Edward IV granted "the freemen of the Mystery of Barbers of the city of London, using the mystery or faculty of surgery," "the mystery," which constituted the beginning of the present Royal College of Surgeons of England.[1] It was not, however, until the middle of the eighteenth century (1745) that each began to limit his functions.

The sign is generally explained thus: The pole represents a stick, usually held in his hand by the patient while getting bled, and the red and white spiral stripes, blood and a bandage, respectively. The colors, it may be observed, are not always arranged in spiral parallel stripes; nor are the colors limited to red and white. The use of blue with, or even without, red is partly allowable, on account of venous blood being somewhat bluish in hue. Mr. Jeaffreson, indeed, says that "the chirurgical pole, properly tricked out, ought to have a line of blue paint, another of red, and a third of white,"[2] spirally arranged.

On the top of the pole there is usually placed, in Great Britain, France, and other European countries, a brass basin, with a semicircular gap in one side. This

[1] Incorporated in the year 1800. Date of the present charter, 1843.
[2] A Book about Doctors, vol. i, p. 7. London, 1860.

vessel is used by the barber to keep the clothes of his patrons from being soiled. With a gallipot, instead of the basin, one has the real pole of the surgeon, which has been extensively used as a sign. Without either, it is in use by the barbers in this country. Lord Thurlow, a member of the House of Commons, delivered a speech on the 17th of July, 1797, in opposition to the Surgeons' Incorporation Bill, in which he said: "By a statute, still in force, the barbers and surgeons were each to use a pole. The barbers were to have theirs blue and white striped, with no appendage; but the surgeons', which was the same in other respects, was likewise to have a gallipot and a red flag, to denote the particular nature of their vocation."

THE COLOR YELLOW.—It is a well-known fact that yellow is a characteristically medical color. A flag of this color is in use at lazarettos, and it is often placed at plague-stricken spots, as a warning to the observer to keep away. How is the medical import of the color to be accounted for? In Christian symbolism it signifies faith, but one must turn, I believe, to astrology to learn the reason of its medical significance. To the astrologer, yellow was the color of the sun; and it was to this planet, anciently so regarded, that the possession of greatest influence over disease was accorded.

THE PHYSICIAN'S CONVEYANCE.—It is said that Asclepiades, the ancient quack, perambulated the world on a cow's back, living on her milk as he went along. We have no reason to believe that such a mode of moving from point to point ever became a professional custom; but physicians in recent times have always had, in most places, characteristic methods of travel, in their rounds among their patients.

It appears that, previous to the reign of Charles II,

it was customary for the English doctors to visit on horseback, "sitting," as Jeaffreson says, "sideways on foot-cloths, like women."[1] At any rate, Aubrey says that Harvey "rode on horseback with a foot-cloth, his men following on foot, as the fashion then was, which was very decent, now quite discontinued."[2] Later, carriages of various kinds, some very showy, came into vogue.

For many years the physicians of Philadelphia, as of other prominent American cities, have been known, as they have gone about their duties, by their use of a special form of phaeton. It is a four-wheeled conveyance, with a fixed top, and is drawn by one horse. Riding in it is pleasant, and its generous top protects well in bad weather. Several years ago a two-wheeled modification of it was introduced, but it did not become popular, and of late has been disappearing. By a few of the more well-to-do in the profession, two-horse carriages of various styles are used; but there is nothing characteristic about them.

The Physician's Gold-Headed Cane.—Much might be written about the gold-headed cane of the physician. Although it has had its day, it was long considered an important part of a medical outfit. Jeaffreson ventures to affirm that formerly "no doctor would have presumed to pay a professional visit, or even to be seen in public, without this mystic wand."[3] What was its history? Did it come down to our time as a representative of the one placed in the hand of the god of medicine by the artists? Jeaffreson expresses the opinion that it is "a relic of the conjuring paraphernalia with which the

[1] A Book about Doctors, vol. i, p. 13.
[2] Letters and Lives of Eminent Persons, vol. ii, p. 386. London, 1813.
[3] A Book about Doctors, vol. i, p. 2.

healer in ignorant and superstitious times always worked upon the imagination of the credulous," and that "it descended to him from Hermes and Mercurius." "It was a relic," he adds, "of old jugglery, and of yet older religion."[1] As the reader is aware, these statements are open to criticism. But, whatever its origin may have been, it was almost universally used by physicians until recently.

The physician's cane was generally smooth, of moderate weight, and with a gold head in the form of a knob. A gold head! What was the meaning of that? Was it used because of the bearer's reputed love of the precious metal? Chaucer says, and with charming casuistry, in the famous description of his doctor:—

> "For gould in physike is a cordial;
> Therefore, he lovede gould in special."[2]

It may, then, have been its medicinal virtues, virtues still occasionally lauded by therapeutic prospectors, which suggested the use of it in the cane. But, after all, the desire to make a good appearance may have been the reason for its use.

The head of the cane was not always solid; on the contrary, it was often, like many a one's, doubtless, who carried it, hollow. In the cavity, it was customary to keep something medicinal, such as ammonia. About this there was much mystery in the minds of the populace. Jeaffreson, who may very properly be regarded as of this class, says that the doctor "always held it to his nose, when he approached a sick person, so that its fumes might protect him from the noxious exhalations of his patient."[3] Something of the kind is still supposed by many to be done. The idea was entertained

[1] A Book about Doctors, vol. i, p. 2.
[2] Canterbury Tales.
[3] A Book about Doctors, vol. i, p. 3.

by more than a few, that within the head of the cane existed, in some cases at least, a familiar spirit which gave the owner extraordinary power. Paracelsus was reputed to have within the pummel of his long sword, which he used instead of a cane, a genius, in the form of a bird, which enabled him to perform wonders. Butler speaks of it thus:—

> "Bombastus kept a devil's bird,
> Shut up in the pummel of his sword,
> That taught him all the cunning pranks
> Of past and future mountebanks." [1]

Alchemists said that it was the philosopher's stone, but it has been with better reason conjectured[2] that it was laudanum,—an agent which the bold, talented quack was in the habit of using much with striking results.

There is preserved, in the College of Physicians of London, a cane which was carried successively by Drs. Radcliffe, Mead, Askew, Pitcairn, and Baillie. On it are coats-of-arms used by the distinguished carriers of it. The gold head of it is in the form of a crooked cross-bar, and not a knob,—the orthodox one. A book has been written with it for the title, treating of its several owners.[3]

THE PHYSICIAN'S DRESS.—At the present time there is nothing about the dress of the physician symbolic of his calling. Formerly the case was different. Until less than a century ago, the dress of the members of the medical profession was both decidedly typical and remarkable. It was worn last, it is said, by Dr. Henry Revell Reynolds, one of the physicians of George III. The items of it were: a well-powdered three-tailed

[1] Hudibras. [2] Occult Sciences, p. 40.
[3] The Gold-Headed Cane. By Dr. McMichael. London, 1828.

wig, a silk coat, breeches, stockings, buckled shoes, and lace ruffles. Says Jeaffreson: "Next to his cane, the physician's wig was the most important of his accoutrements. It gave profound learning and wise thought to lads just out of their teens."[1] If this were the case it should be coaxed into use again.

THE PHYSICIAN'S RING.—Among the ancients, rings were held in high esteem. The signet of Solomon, which had considerable to do with the building of the great temple, and the ring of Gyges, the shepherd of the king of Lydia, through which he could become invisible and see people at pleasure, are examples of the surprising powers often accorded to them. One was, until a period not far distant, an important item of the insignia of the medical man. It is spoken of in one of the spurious Hippocratic works. The seal variety was the orthodox one. Different stones were used, and on these were engraved various designs. As indicative of his position, a learned writer says that the doctor wore the ring "on the third finger of the right hand."[2]

The physician's ring was viewed generally in the light of an amulet, or talisman. The engraving it bore had much to do with its supposed virtues; and the stone also gave it special value. Aubrey thus refers to a sapphire ring: "They say it preserves from infection and pestilential diseases. See Albertus Magnus *de hoc.* I warrant he has recited virtues enough of it."[3] Red carnelian was believed to be curative of hæmorrhage, and coral of nervous affections.

[1] A Book about Doctors, vol. i, p. 11.
[2] Finger-Ring Lore. By William Jones, p. 191. London, 1877.
[3] Remaines of Gentilisme and Judaisme, p. 210.

CHAPTER XIX.

MEDICAL SYMBOLISM IN PRACTICE.

It is hardly necessary to say to the reader who has followed me this far that the scope of medical symbolism is not very restricted. In extent it is obviously not limited; nor is it without variety and the means of variety enough. Yet how little use does one see made of it! How seldom do publishers take any advantage whatever of it, on the covers of their books or anywhere else! And what little is here and there attempted is apt to be a trifle preposterous, on a par with the misuse of the serpent by the quack-medicine man, who confounds the most obvious religious (Christian) significance of it with the medical.

Examples without limit of questionable medical symbols might be given. Here is a publisher who makes use of the caduceus of Hermes; there is one who displays the club of Hercules, with a rather venomous-looking serpent crawling down it from aloft; and yonder one who exhibits a skull on a closed book, suggestive of a hopeless meditation on death,—the reverse of what the physician should indulge in. But, at a time when the absence of symbols is almost the rule, perhaps one should try to be a little blind to the faults of those which are met with.

Of a collection of medical symbols on hand, few are notably good. I may instance a fair specimen. On the title-page of a journal edited by the late Dr. Dunglison, a learned and sensible man, *The American Medical Intelligencer*, which had a brief existence in the latter

half of the fourth decade of this century, appears the figure a copy of which is here given (Fig. 26). The idea is better than its execution.

Ideas for symbolic designs of medical import are not scarce. The instruments and drugs used by the disciples of Æsculapius afford a host, if one does not wish to turn to mythology or anything allied. But, although the scientific physician might properly hesitate about using, say, an emblem of St. Luke, the patron saint of physicians, there are mythological and related conceptions, many of which might be utilized to good purpose. Thus, if it be desired to give an Egyptian design on the cover of a book, say, on obstetrics, the main part of an admirable one may be found ready at hand on the wall of the great temple at Luxor.[1] It is the scene —and a sufficiently chaste one, too—of the maiden mother giving birth to the future king, Amunotoph III, for whom the temple or palace was erected about 1400 B.C. She is seated on the midwife's stool, as described in the Bible,[2] while two nurses have her by the hands, doing what they can to ease the pains of labor. Or, a representation of Pasht, Bubastis, or Sekhet, the sister of Horus and mother of Imhotep,—who generally appeared cat-headed because the cat, a most sacred animal, was consecrated to her,—would not be inappropriate; for, to use the words of Ebers, "she seems to have been honored as the deity who conferred the blessing of children and watched over their birth."[3]

FIG. 26.—A MEDICAL SYMBOL.

But, for a design of obstetrical import, there could

[1] See Sharpe's Egyptian Mythology, p. 19.
[2] Exodus, i, 16.
[3] Princess, vol. i, p. 37.

probably be few better than one in which prominence were given to the good housewifery symbols,—the pestle, hatchet, and broom; those, respectively, of Pilumnus, a god of children; Intercidona, the goddess who first taught the art of cutting firewood; and Deverra, the goddess who invented the broom, that great instrument of cleanness and enemy of the Typhon, or, I may say, Hydra, of many modern doctors,—the disease-germ: the deities that saved the pregnant woman from harm from her special enemies, the unclean sylvan gods. The broom! Wise old Romans! Wiser than the unsteady enthusiasts of our time, with bottles of carbolic acid in their hands yesterday and of corrosive sublimate to-day. And with these symbols, especially if the design were for a work by a female author, there might be given a figure of Juno Lucina, the special friend of women in labor, the type of the Eileithyiai, the handmaids of Hera, of the Greeks.

And here I may observe that, according to ancient custom, the goddess Juno Lucina should be represented with one hand empty and, as it were, ready to receive the coming infant, and with the other holding a lighted torch, a symbol of life. The torch should be erect, for when the flame is turned downward it signifies death. In the seal of the American Gynæcological Society, a woman, possibly meant for Juno, is represented with a torch in her right hand and in the other a sprig of evergreen, with a baby resting on the arm. This is of obstetric import. The members of the society, however, consider themselves something else than midwives. Judging from their title, they might be *petits maîtres.*

CHAPTER XX.

THE PENTACLE.

By way of conclusion, and at the risk of running too deep into occult learning, I will give some account of a remarkable magic figure, of interest to the physician, about which little appears to be generally known, but which is often referred to in certain out-of-the-way lines of study. I refer to the pentacle, or triple triangle, the pentalpha of Pythagoras, the formulator of a celebrated system of philosophy, the basal idea of which is that all things sprang from numbers. A representation of it in its simple form is given herewith. On inspection, it will be observed that the figure has five arms, or points, five double triangles, with five acute angles within and five obtuse ones without; so that, if five—a number made up of the first even (2) and the first[1] odd one (3)—be possessed of the virtue which the occult philosophers have asserted, the pentacle must have much. It is, in fact, the famous legendary key of Solomon, which has played a remarkable rôle in history. Tennyson, one of the few well-known authors by whom reference to it is made, speaks of it when he makes one of his characters (Katie) thoughtlessly draw (it can be done through one stroke)—

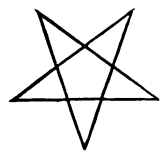

FIG. 27.—THE PENTACLE.

> "With her slender-pointed foot,
> Some figure like a wizard's pentagram,
> On garden gravel."[2]

[1] One was not regarded as a number.

[2] The Brook.

I have said that little is generally known about the pentacle. Here is some evidence: Ruskin defines it to be "a five-pointed star, or a double-triangle ornament, the symbol of the trinity "[1]—a wrong definition, but not quite as bad as that given in Mollett's handsome work, to wit: "A figure formed of two triangles, intersected so as to form a six-pointed star."[2] The opinion is expressed by Bayard Taylor that the magical powers attributed to it could be explained by the fact that, being made up of three triangles, it was a "triple symbol of the trinity."[3] This may be true, but it was regarded as possessing mysterious powers long before Christianity originated.

A common mistake—the one evidently made by Mollett—of even learned writers (as, for example, Oliver[4] and Fairholt[5]) is to confound the pentacle with the seal of Solomon (called also the shield of David), which consists of two equilateral triangles so arranged as to form a six-pointed star.

By the German writers on magic and kindred subjects, the pentacle is often called *Drudenfuss*,—that is, wizard's foot,—a term which Mackey[6] takes to be a corruption of the word for Druid's foot, by which people it was in use, being often worn, as a symbol of deity, on their sandals. As Bayard Taylor, however, says: "*Drud*, from the same root as Druid, was the old German word for wizard." In Mr. Blake's interesting book,[7] a representation of a very old coin is given, on which the mystic figure appears.

[1] Art Culture, p. 468. New York, 1874.
[2] Dictionary of Words used in Art and Archæology. Boston, 1882.
[3] In his notes to Faust.
[4] The Pythagorean Triangle. London, 1875.
[5] Dictionary of Terms in Art.
[6] Encyclopædia of Freemasonry. Philadelphia, 1875.
[7] Astronomical Myths. London, 1877.

The pentacle has been observed on a figure of Anubis, in Egypt. It is stated[1] that it was used on coins of Antiochus Epiphanes, and also[2] of Lysimachus. I have seen it stated somewhere that it is one of the old sect marks of the Hindus; but this is an error, I believe. By referring to Coleman's[3] or Birdwood's[4] work, it will be found that it is Solomon's seal which has been so used. It was one of the totems of the American Indians. Dawson[5] gives a picture of it as seen sculptured on the Roches Percées, a remarkable solitary mass of sandstone on the plains west of Manitoba.

I have said that the pentacle has been observed on a figure of Anubis. It would appear to have been well known and highly prized by the early Egyptians, or rather, perhaps, I should say Egypto-Chaldeans, if a recent writer, Mr. Robert Ballard, is to be believed. He declares that "it is the geometric emblem of extreme and mean ratio, and the symbol of the Egyptian pyramid, Cheops."[6] Let a pentacle be formed within a circle. Around the interior pentagon of it describe a circle. Around this circle form a square. "Then will the square represent the base of Cheops." Again, draw two diameters to the outer circle, intersecting at right angles, and each parallel to a side of the square. "Then will the parts of those diameters, between the square and the outer circle, represent the four apothems of the four slant-sides of the pyramid." Still again, connect by lines the angles of the square with the outer circle at the four points indicated by the ends of the

[1] Broughton's Italy, vol. ii.
[2] Notes and Queries, vol. ix, p. 511, third series.
[3] Mythology of the Hindus. London, 1832.
[4] Indian Arts. London, 1880.
[5] Fossil Men and their Modern Representatives, p. 272. London, 1880.
[6] The Solution of the Pyramid Problem, p. 92. New York, 1882.

diameters. Then "the star of the pyramid is formed, which, when closed as a solid, will be a correct model of Cheops."

Mr. Ballard, it is to be feared, like Mr. Piazzi Smyth, has not the power to perceive coincidences and afterthoughts. His book, however, is decidedly original and interesting.

I may observe that if the plan of the great pyramid was fashioned after the pentacle, and Mr. Proctor be right in saying that it is identical with "the ordinary square scheme of nativity,"[1] the figure of the astrologers

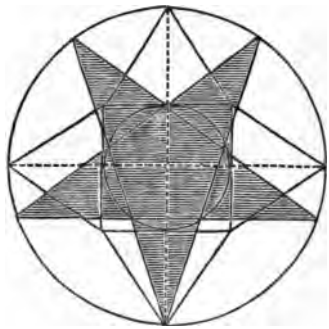

FIG. 28.—THE PENTACLE AND THE GREAT PYRAMID.

used in casting horoscopes, it follows that the pentacle furnishes also a key to the latter. Then, if it be a fact that the pyramid was designed by and constructed under the superintendence of early Chaldeans, one has reason to infer that the pentacle was of Oriental origin. Probably it was at first a symbol of the sun,—a purpose for which it has been used by different bodies of mystics, and others.

It is interesting to notice that the figure was one of the symbols of the great hero-myth, Quetzalcoatl, a

[1] The Great Pyramid, p. 35.

light-god according to some, but really, according to Reville,[1] a god of the wind, who was generally represented in the form of a feathered serpent. Thus Dr. Brinton says: "In one of the earliest myths he is called *Yahualli ehecatl*, meaning 'the wheel of the winds,' the winds being portrayed in the picture-writing as a circle or wheel, with a figure with five angles inscribed upon it, the sacred pentagram. His image carried in the left hand this wheel, and in the right a sceptre with the end recurved."[2]

The pentacle has been accorded great potency, and used extensively to keep off witches and all sorts of evil influences, including the devil himself, and hence it has served purposes very similar to those to which the horseshoe has often been put. Aubrey says that it was formerly used by the Greek Christians, as the sign of the cross is now, "at the beginning of letters or books for good luck's sake,"[3]—something which old John Evelyn was wont to do in his works, and as Southey placed the puzzling monogram,[4] meant, perhaps, to have similar significance on the title-page of his book, "The Doctor." One is found in the western window of the south aisle of Westminster Abbey, which, doubtless, the black monks, as they chanted in the choir, often looked on with superstitious emotion. It may be seen on many a cradle and threshold at the present day in the Fatherland.

The readers of Goethe's great work will remember that Dr. Faust had one on his threshold, and that, when he began to perceive that there was something decidedly

[1] The Native Religions of Mexico and Peru, p. 57. New York, 1884.
[2] American Hero-Myths, p. 121.
[3] Remaines of Gentilisme and Judaisme, p. 51.
[4] An equalateral triangle divided into three equal triangles by lines meeting from the three angles.

suspicious about the character of the "poodle," he remarked that

> "Für solche halbe Höllenbrut
> Ist Salomonis Schlüssel gut."

How Mephistopheles himself got in was afterward explained by his showing that one of the angles of the "Drudenfuss" was left open.

Disciples of the Samian sage, cabalistic[1] Jews and Arabians, and others, especially Gnostics, long viewed the pentacle as a symbol of health, and made use of it as

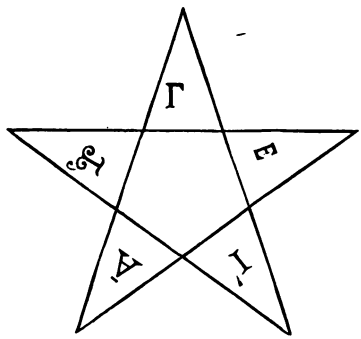

FIG. 29.—HYGEIA, A SYMBOL OF HEALTH.

an amulet, calling it Hygeia, the name of the goddess of health. It was so called, and to some extent, likely for a similar reason, regarded as a sacred symbol of health, because it could be resolved, it was believed, into

[1] Professors of the Cabbala, a mystic philosophy, believed that there was a secret meaning in Holy Writ and a higher meaning in the law, and pretended to be able to perform miracles by the use of names and incantations. Auerbach gives an interesting account of them in his novel, "Spinoza." He gives this as an instance of their mode of reasoning: "The Hebrew word for Messiah contains the same number as the Hebrew word for serpent, in which form Satan seduced Eve; the Messiah will, therefore, bruise the head of the serpent and banish sin and death from the world."

the Greek letters which form the word Hygeia; and these were placed one on each point of the figure.[1] It was accepted, in fact, as a sort of rebus of the name of the celebrated daughter of Æsculapius. The scholarly and ingenious reader may be able to trace, more or less definitely, this reputed similarity. It is an interesting feature of what is certainly a very remarkable figure.

[1] The word *Salus*, the synonymous Latin name, was also used in the same way. In Mrs. Pelliser's work it is thus seen. It is there spoken of as a device used by Marguerite of France, wife of Henry IV and the last of the Valois.

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